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Hero Memorial-stones of Kathiawar

by JAMES HORNELL

THE cult of the war-hero which may be considered as a variation upon that of ancestor-worship, is found in India in its fullest development among the Rajputs. The clans of these people, together with those of their numerous offshoots, claim to represent the Vedic Ksatriya or warrior caste, ranking next in order to that of the priestly Brahmans in the Hindu hierarchy of caste. By virtue of this (presumed) high social position the Rajput despises manual labour as beneath the dignity of his ancestry, often his sole inheritance. Until the Pax Britannica brought lasting peace and order to the land, war and forays were the Rajputs' main occupation and pastime. Warlike virtue was esteemed above all else ; the martial deeds of great warriors formed the dominant theme of the songs of the tribal bards. A code of chivalry was evolved, acknowledged and practised generally, and this in great measure moderated the trials and alleviated the hardships suffered by the defeated and despoiled.

With prowess in the field and a heroic death glorified as the highest of virtues, one result was that whoever so distinguished himself was honoured in death, and his memory as a hero of the tribe or clan perpetuated by the erection of a memorial or sacrificial stone, known generally as a *paliya*[1] in Kathiawar and as a *jujhar* in Rajputana.

Although the Rajputs constitute a military aristocracy based upon a feudal system analogous to but not homologous with that of medieval Europe, a democratic colouring is present, for no matter how poor a

[1] Meaning ' Home of the guardian spirit ' according to Cooke in his annotated edition of Tod's *Annals and Antiquities of Rajasthan*, 1920, p. 1700.

Rajput may be, he considers himself as the blood equal of his seigneur. Linked with this is his contempt for work in the fields and especially for trade ; the only callings agreeable to his pride of caste are the bearing of arms or a position in the government service of his State. Thus it is that even the smallest of Rajput States has to carry a heavy and often well-nigh intolerable burden of officials of whom a large percentage is redundant. Only if needs must will a Rajput hold the plough, but in days not long past his sword was always within reach.

Rajput communities are scattered widely through northern India ; Rajputana is but the centre where the oldest and strongest Rajput dynasties hold sway. There, settled government has long been established ; the major States generally have made remarkable progress in modern times under the guidance of loyal and enlightened rulers.

Only in outlying Kathiawar (the ancient Saurastra)—the great Gujarat peninsula half-way between Bombay and Karachi—does the old order linger in strength, much reduced it is true but still in easily recognizable guise by reason of the survival there of a multitude of minor chieftains, each claiming sovereign jurisdiction within the bounds of his territory. This land is a veritable epitome of the state of England under the Normans ; it reproduces even more closely the social condition of the Scottish Highlands before the work of that great road-making pacifier, General Wade, brought the unruly territorial chieftains to heel after the clan spirit had been shaken on the field of Culloden.

This land of Kathiawar was side-tracked by commercial progress until a few of the principal rulers bestirred themselves early in the present century to open up the land by building railways and by dredging and equipping harbours able to deal efficiently with overseas steamer traffic on a large scale. Of such enlightened rulers was His Highness the late Gaekwar of Baroda, who turned a rockbound fishing hamlet into the modern port of Okha ; another was that one-time idol of the English cricketing world, Ranjit Sinhji, the Maharaja Jam Sahib of Nawanagar, who similarly created a fine harbour at Bedi Bandar, a few miles north of his capital, which he also modernized.

Apart from the territories of these and a few other important chiefs, the land of Kathiawar is parcelled out among some 200 States, mostly of small and often of minute area. Many of the rajas, nawabs and princelings who rule them, own little more than a ruinous fortalice, perched on a hillock, with iron-spiked gates still shut at nightfall and surrounded by a clutter of mean houses, huddled under the crumbling walls for what protection is possible against raiders.

To travel through the country from one petty State to another, mounted on one of the spirited little ponies for which Kathiawar is famous and escorted by a fierce-looking bearded ancient, armed with scimitar and dagger, or, maybe, to jolt and sway over deeply rutted tracks in a country cart drawn by a team of spirited but self-willed mules, gives a far clearer insight into what life was like in the dark ages of feudal Europe than the reading of all the books devoted to this subject.

On one occasion some twenty years ago when travelling along the outskirts of the Gir forest—the last remaining haunt of the lion in India—a pall of dense smoke in the distance attracted my attention. Asked what its meaning was, a village headman answered, 'That, your Honour, is where a band of outlaws have been making their home; they have become too troublesome and bold of late and so the Raja has ordered them to be burned out'.

These outlaws are gentlemen of the Robin Hood type. They have their own code of honour. When a raid on a village has been determined upon, notice is usually sent to the headman informing him of the decision to descend upon his village and to remove whatever they may fancy. No hint is given of the date when the raid may be expected; it may be within a few days or months may elapse before it occurs. And, like Robin Hood, these modern outlaws have a retributive way of despoiling most thoroughly whoever is considered to be an oppressor of his neighbours. The greedy moneylender suffers in particular; the raiders love to rifle his moneybags and to destroy the records of debts owing to him. Because of this the outlaws are popular with the poorer villagers and such sympathy is the greatest asset the outlaws have; it secures for them early information of any move to be made against them; if arrested, an ironclad alibi prevents justice being done.

Their numbers are recruited to a considerable extent from the hangers-on of the smaller chieftains. In India if a man possesses money or position, his poor relations consider it to be his bounden duty to provide for them. The threadbare courts of the Kathiawar kinglets are crowded with these people. From time to time an impecunious chief, finding the drain at last unbearable, rises in wrath and drives the idlers out. Knowing no trade, for they are too proud to learn one, how may poor gentlemen live unless they join an outlaw band? Recruits of this type are welcome. Desperate, landless men, bitterly resenting the treatment received from the head of their clan, and with friends in his stronghold, their help and knowledge are invaluable should the outlaw captain ever decide to raid the chief's stronghold.

Many of the people of Kathiawar, in addition to those of the ruling caste, claim to be of Rajput origin or of Rajput affinity. Their customs are similar, and bravery is equally esteemed as the greatest of all manly qualities. Wherever villages contain a strong strain of this Rajput element, memorial stones to heroes and heroines long since dead, are usually to be met with on the outskirts. These are particularly numerous in the little territory of Okhamandel, belonging to Baroda, at the extreme northwestern corner of the peninsula. Here is the home of the Vaghers, a once lawless and turbulent tribe. From time immemorial they have scorned honest toil, represented here by heart-breaking agricultural labour in a stony land of deficient rainfall; rather have they preferred the dangerous but exciting life of pillage and piracy.

The latter activity is of old standing. Mas'udi, writing in the tenth century,[2] tells of Socotra being a rendezvous of Indian corsairs called *Bawarij*, ' who chase the Arab ships bound for India and Ceylon just as the Greek galleys chase the Mussalmans in the sea of Rūm, along the coasts of Syria and Egypt '. These Bawarij, according to Elliot[3] (quoting from Al Biruni), hailed from the coasts of Kach and Gujarat. In the 14th century Marco Polo[4] testifies to the continuation of the same practices, for we find him declaring that the people of Gujarat ' are the most desperate pirates in existence and one of their atrocious practices is this : when they have taken a merchant ship, they force the merchants to swallow a stuff called Tamarindi, mixed with sea-water, which produces a violent purging. This is done in case the merchants, on seeing their danger, should have swallowed their most valuable stones and pearls. And in this way the pirates secure the whole '.

The tale is carried into the 17th and 18th centuries by Captain Alex. Hamilton ;[5] from him we learn that the lair of the Vagher pirates of Okhamandel which he calls the province of Sangania, ' next to Cutch ', was ' the seaport of Baet [Beyt], very commodious and secure. They admit no trade but practice piracy. . . . I had several skirmishes with them. They, being confident in their numbers, strive to board all ships they can come at by sailing. Before they engage in fight, they drink Bang, which is made of a seed like hemp-seed, that

[2] *Muruju-l Zahib* (' Meadows of Gold '), III, 37.

[3] *The History of India as told by its own Historians*, 8 vols., 1867–77, vol. I, p. 65.

[4] Yule's edition of Marco Polo's *Travels*, 1871, vol. II, p. 328.

[5] *A New Account of the East Indies . . . from* 1688 *to* 1723, 2 vols. Edinburgh, 1727. Also in Pinkerton's *Voyages*, VIII, 310.

has an intoxicating quality and whilst it affects the head they are furious. They wear long hair, and when they let it loose, they'll give no quarter '.

Several instances are given by Hamilton ; as one or other of these was probably the occasion for the erection of the most interesting of the hero-stones which will be described later, it is pertinent to quote the passage in question. According to this author, ' in anno 1686 one of their ships cruising between Surat and Bombay engaged the *Phoenix*, an English man-of-war of 42 guns, bound for Surat. Finding how superior the armament of the *Phoenix* was, the pirates endeavoured to draw off. The *Phoenix* sent her boats off to endeavour to make them yield without further loss of life. They scorned quarter and killed and wounded many of the English. Whereupon Capt. Tyrrel, in command of the *Phoenix*, trained his lower tier guns on the pirates and sank her—most refused quarter and only about 70 out of the original 300 aboard were taken alive '.

Again, ' in 1698, one Capt. Lavender, in the ship *Thomas*, bound from Surat to Mocha, encountered four sail of these freebooters and fought them bravely ; but they burnt the ship and all her crew, because he would not yield. They are very cruel to those they can master, if they make resistance ; but to those that yield without fighting, they are pretty civil '.

Nineteen years later, in 1717, the pirates, who had now reached the summit of their power, made an attack in overwhelming force upon the ship *Morning Star*, on her passage from Gombroon to Surat. Hamilton (loc. cit) says ' she was richly laden, which they were apprised of, and two squadrons were fitted out from two different ports to waylay her and accordingly she fell in with eight sail of these pirates. One was a large ship of near 500 tons and three others were ships between 200 and 300 tons and the other four were grabs or gallies and sheybars or half gallies. They reckoned in all there were above 2000 men in their fleet and the *Morning Star* but 17 fighting men. . . . The first attack was by the greatest ship alone, but was soon obliged to shear off again with the loss of some men, and the captain of the *Morning Star* was wounded in the thigh by a lance darted at him. . . . The pirates were not discouraged by this first repulse, but joined their forces and counsels together, and after a day's respite and consultation, they attacked the *Morning Star* a second time, the two largest ships boarding, one on her bow and another on her quarter, and three more boarded them two, and entered their men over them. The combat was warm for four hours, and the *Morning Star* had seven men killed and as many

wounded ; but kind Providence assisted her. Whilst she was on fire in three places and had burnt through her poop and half deck, she was disengaged of them and left five of the largest so entangled with one another that they could not pursue her. So she pursued her voyage to Surat but having no surgeon on board she called at Bombay, to get her men dressed and cured '.

Captain Hamilton also records the presence of pirates of a similar type living on the Kathiawar coast between Diu and Dand Point whom he calls Warrels [Vadels ?], often associated with the Vaghers of Beyt in piratical attacks. ' They strive ', he says, ' to board their prizes and as soon as they get on board they throw in showers of stones on the prize's decks, in order to sink them that way, if they don't yield, and they have earthen pots as big as a six-pound granadoe shell, full of unquenched lime, well sifted, which they throw in also, and the pots breaking, there arises such a dust that the defendants can neither breathe nor see well. They also use wicks of cotton dipped in a combustible oil, and firing the wick, and throwing it into their opposer's ship, it burns violently, and sets fire to the parts it is thrown on. They have no cities and their villages are small '.

While the gradual increase of British sea-power in the Indian Ocean during the years that followed, slowly circumscribed and eventually eliminated the activities of the Vagher pirates, their predatory raids by land continued unabated till 1859 ; in that year their overlord, the Gaekwar of Baroda, finding himself unable to enforce law and order in the Okhamandel territory and to afford protection to the orderly among his subjects there, appealed to the Government of India for assistance.

A naval expedition consisting of several vessels belonging to the then existing Indian Navy, with transports conveying a strong military force, was accordingly despatched from Bombay to reduce the truculent tribesmen to ways of peacefulness. On 6 October 1859, after a heavy bombardment of the fortifications of Beyt, the second most important town in the territory, where the rebels had concentrated their forces within the strongly walled temple buildings, a landing party was disembarked with orders to storm the defences through the breach which the British guns had made.

The attempt to capture the place by storm failed. The Vaghers fought fiercely, nobly upholding the Rajput tradition of bravery ; they poured in a desolating fire from the curtain upon the storming party and ladder carriers. To add to the difficulties of attack, the rebels

had covered the face of the beach with masses of prickly pear and thorn bushes, the most horrible form of chevaux-de-frise known to them. The attack was abandoned as hopeless without further bombardment and the storming party retreated to the ships, having suffered severe loss, including that of two British officers killed. During the night the defending force abandoned the town, retreating to Dwarka, which in turn had to be bombarded by land and sea a few days later, before the rebel tribe would make submission (PLATE I).

In passing, it is interesting to note that these two actions are memorable not only as being the last offensive operations within the confines of India carried out by the old John Company's Indian Navy, before its abolition in 1863, but also as being the last bombardment by British ships of any Indian fortified place.

After the pacification of Okhamandel, both sides erected memorials to their dead. The British one consists of an unpretentious flat-topped tomb in the centre of a tiny walled-in enclosure on the desolate high ground south of the town of Beyt. Graven on the covering slab is a laconic inscription without dedication, which merely states that Ensign E. T. Willaume of the 6th Bombay Native Infantry and Captain M'Cormac of the 28th Regiment of Foot were killed on 6 October 1859.

The Vaghers were accustomed to erect more ornate memorials, for, in common with other kindred of the Rajputs, ancestor worship and the veneration of heroes are, or were till recently, living forces in their tribal life. These cenotaphs (*paliyas*) consist of upright slabs whereon the dead warrior is represented conventionally either on horseback or on foot. Outside the village of Gopi Rajpura, lying on the mainland side of the narrow strait dividing it from the island of Beyt, and a place associated closely with the story of the Hindu hero-god Krishna, once the lord of this land, a group of these hero-stones bears witness to the heroism of the defenders of Beyt in 1859. According to the village headman, the rank of the hero is shown conventionally by the trappings of the horse he rides; if richly caparisoned after the fashion of the chargers of medieval knights, the cloth embroidered and fringed with tassels, he was a man of high rank, a chieftain; if he bestrides a plain saddle, he was a man of inferior status; represented without a horse, the hero was a stripling.

No village, however poor or mean, is without, at least, one or two of these memorials; more often, there are a number ranged in line upon a stone platform; occasionally several groups are distinguishable, differing in age and design, bespeaking cycles of warfare or unrest.

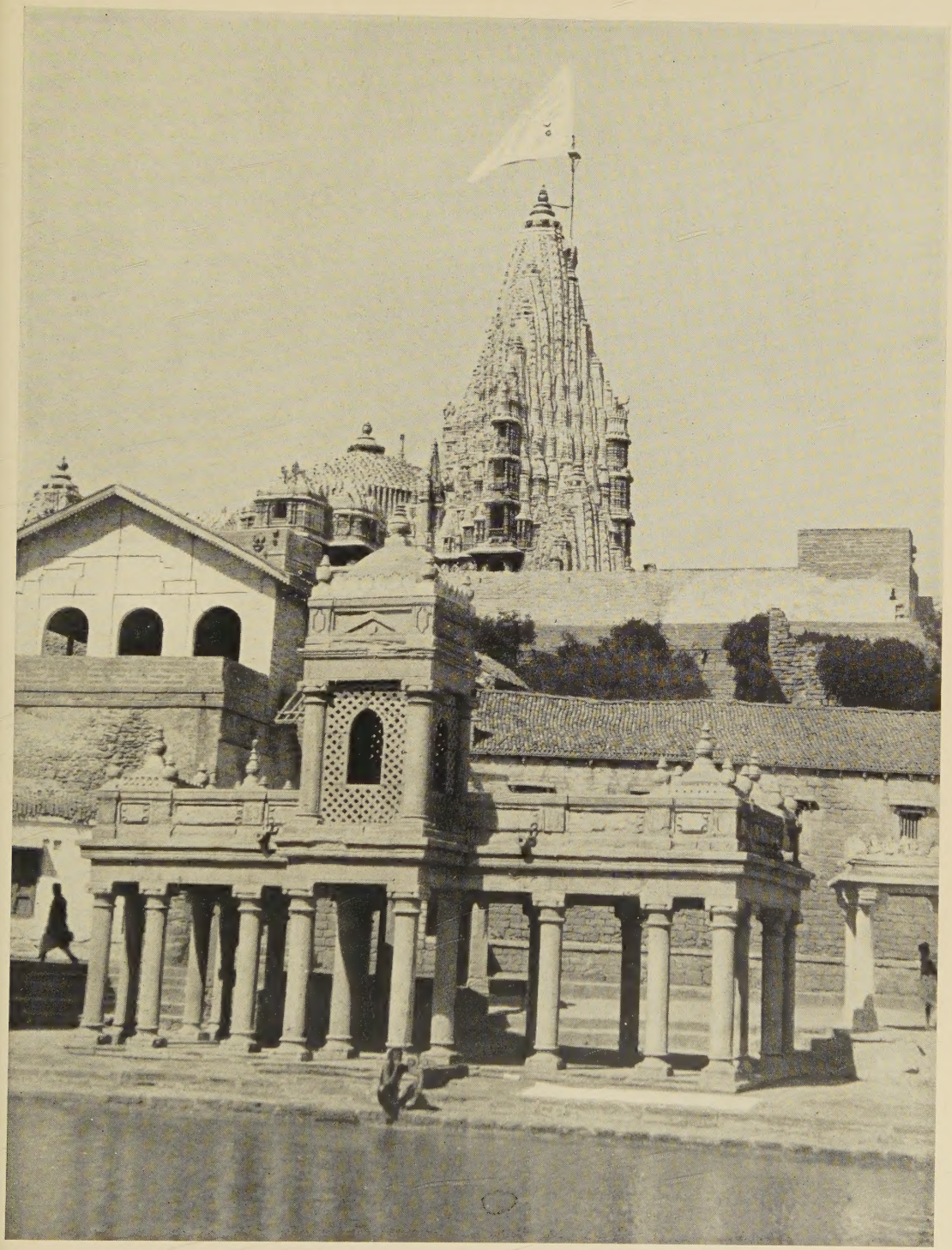
Life must have been held cheap in the old days to judge by the number of these paliyas that survive. Usually each locality favours its own distinctive conventional design in the details of the sculpture, as shown in the photographs which illustrate this note. In some the warrior carries a lance, in others a sword is brandished in one hand, a round targe held aloft in the other. Some hold both sword and spear. Whatever other devices may ornament the upper part of the many local designs of memorial stones, conventionally crude figures of the sun and moon are usually present; they symbolize the pious hope of the family that the memorial may last as long as sun and moon endure.

Some paliyas are of considerable age (PLATES II, III). At Aramra the headman told me that some of his village's stones were fully 400 years old as shown by the inscriptions, and among a number recorded from Sontra, near Karipur in Rajputana, by Tod,[6] the following are typical :—

> 'Samvat 1422 (A.D. 1366). Pardi, Teja, and his son Deola Pardi, from the fear of shame, for the gods, Brahmans, their cattle and their wives, sold their lives.
>
> 'Samvat 1446 (1390). In the month of Asarh (*badi yakam*): Monday, in the castle of Sontra (Sutrawan durg), the Pramer Uda, Kala, Bhuna, for their kine, wives, gods, Brahmans, along with the *putra* [deified youth] Chonda, sold their existence'.

By far the most interesting of the memorial stones set up to bygone heroes in Kathiawar is one of a small group outside of the walled town of Aramra, once of much importance as the last halting place of Hindu pilgrims on their way to the holy shrine of Krishna across the channel on Beyt Island. On this stone, instead of the conventional horseman there is carved, in strong relief, the representation of a square-rigged vessel, evidently of considerable tonnage and well armed, for a row of rectangular gunports are conspicuously shown, extending from stem to stern along the side. The vessel has all the distinguishing characteristics of an East Indiaman of the latter half of the 17th century. The poop is notably high, half-deck and quarter-deck both present. The bows are low, with a curved stem turned inwards at the head. A massive bowsprit steeves at a high angle clear of the stem and on its outer end a short sprit-mast is stepped; this carries a fair-sized square sprit-topsail. Of the three major masts, foremast, mainmast and mizen, the mainmast is the tallest. All carry square sails which from

[6] Tod, III, p. 1702.



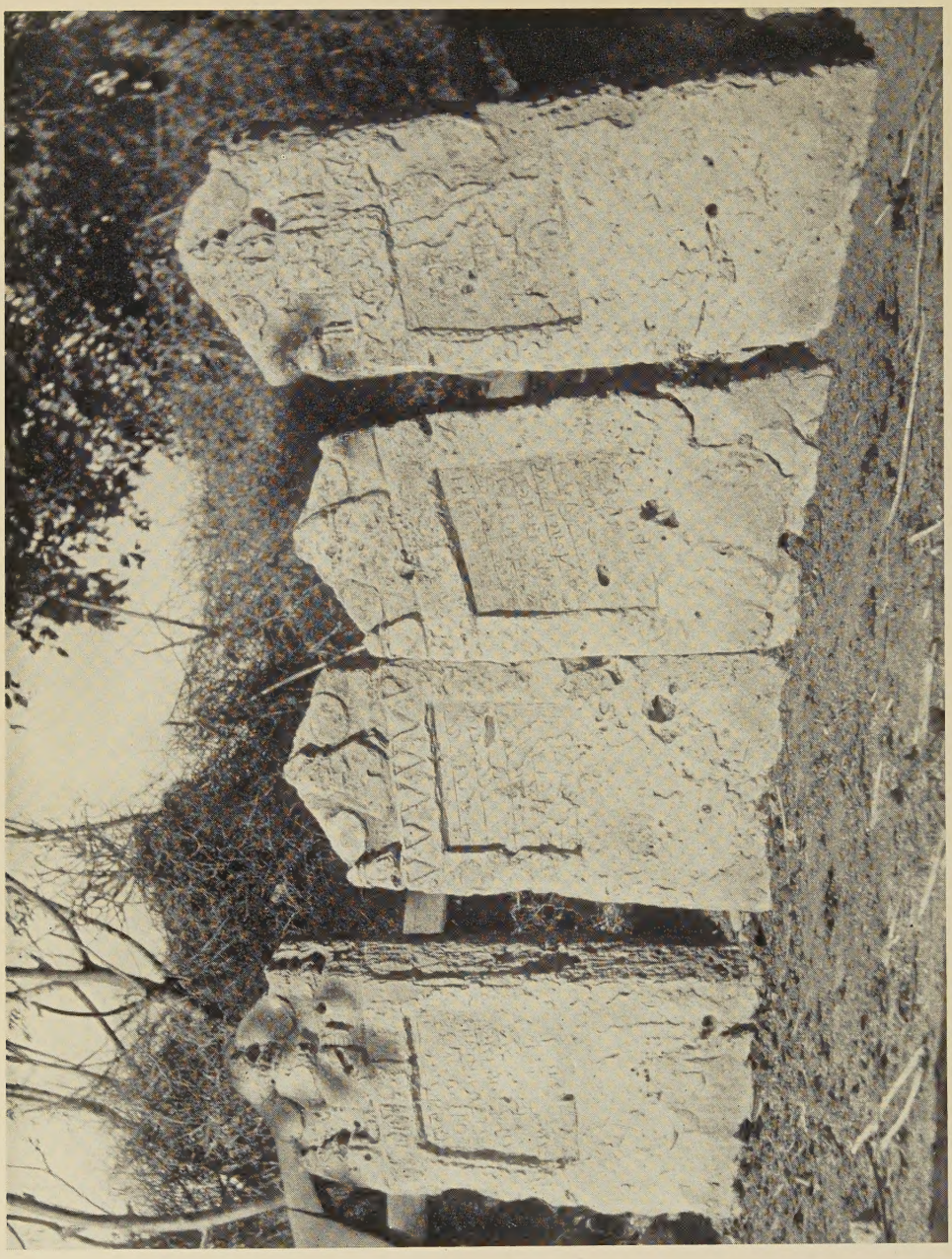
TEMPLE AND BATHING GHĀT, DWARKA

The lower part of the temple buildings is concealed by the massive wall which served as the principal defence of the rebels in 1859

Pls. I–IV, *Ph.* James Hornell

facing p. 296

PLATE II



FOUR VERY OLD PALIYAS OF UNUSUAL DESIGN BETWEEN VELAN AND KODINAR

OLD AND FINELY SCULPTURED PALIYAS OUTSIDE THE SHANK NARAYAN TEMPLE, BEYT. ALL THE RIDERS ARE ARMED WITH SPEARS

PALIYAS OUTSIDE ARAMRA

The one whereon a flexed arm is sculptured is dedicated to the memory of a wife who committed suttee. The blurred appearance of the figures is due to repeated daubing with vermilion paste by descendants who venerate their ancestors at annual mournings, when their hungry ghosts have to be fed and placated

their position high up on the masts obviously represent topsails ; the lower sails have been omitted by the sculptor in order to provide space for the representation of three warrior figures of disproportionate dimensions, each brandishing a scimitar.

On my enquiring from the headman what is the significance of this sculptured ship, so unlike any ordinary type of Indian sea-craft, he summoned a villager of the boat-building caste, people who serve also as seamen on coasting vessels ; ' This man ', he said, ' is a descendant of the man to whom the memorial was erected '. When the villager arrived, he stated that the hero commemorated was a pirate of much renown in his day, the captain of a great pirate ship manned by kinsmen of the Vagher tribe ; he met his death during an attack upon a large European ship. Whether the foreign ship was taken or the attack beaten off, he could not say ; he maintained, however, that the ship represented was the identical one commanded by his ancestor.

The pirate's descendant stated that his ancestor was the fifth life from and including himself. Taking twenty-five years as the average for each of four generations, together with an extra twenty-five as my informant was over fifty years of age, we arrive at an estimate of about 125 years as the period since the pirate's death. This would appear to fix his exploit as sometime during the opening years of the 19th century. Such a dating is manifestly erroneous ; the worn condition of the stone in a land of deficient rainfall, the ruinous state of the platform on which it stands, and, most decisive reason of all, the antique type of vessel represented, all controvert this conclusion. Family traditions of the kind under question are notoriously unreliable everywhere and especially so in India ; the five lives spoken of are unquestionably a guess and we must rely solely upon the evidence afforded by the type of ship depicted. This has all the main characteristics of European vessels built during the hundred years ending 1720, more particularly in regard to the form of the prow and the presence of a sprit topmast. The sculpture shows the latter to be stepped at the extreme end of the bowsprit ; a jackstaff bearing a flag is also present and it is notably short ; both these features are peculiar to ships of this description—warships and armed merchantmen—rigged between 1620 and 1720. The absence of a jibboom further certifies this dating, for this spar was not authorized for our Royal Navy till 1705. The high poop made up of half-deck and quarter-deck, is also a feature commonly found in vessels of this period, as is the recurved beakhead ; a transverse bulkhead at the heel of the bowsprit is another characteristic of the period named—its presence is

clearly indicated in the sculptured figure some distance abaft the beakhead.

The accuracy of the details shown is amazing, considering local conditions. This attests both the skill of the sculptor and the acuteness of his powers of observation ; there is nothing crudely conventional in his treatment of the theme—even the shrouds are represented in addition to the major features enumerated. Flags fly from all the mastheads and an ensign is carried at the stern. Such accuracy is incredible unless the sculptor was well acquainted with the details of design common to European ships of that time, and had ample opportunity to study them at close quarters at his leisure. There is no doubt that European vessels were occasionally captured and taken as prizes into the pirates' harbour at Beyt, there to be rifled and broken up or possibly taken into their own service if handy enough for their purposes, for as already mentioned, vessels up to 500 tons were included in the Kathiawar pirate fleet in 1717.

Whatever be the details of this particular action, this stone bears silent witness to an old-time bloody tragedy as well as being a hero's memorial ; the death of the pirate chief and of two of his lieutenants—for three figures are shown standing on the deck—was never achieved except at a heavy price. What were the circumstances attending the fight commemorated can never be known but the evidence generally suggests that the memorial was dedicated to the memory of the Vagher captain and officers of the 500-ton pirate ship which with smaller craft had a bloody and unsuccessful engagement with the *Morning Star* in 1717, as already related.

Men do not monopolize all the glory of heroic death in these old memorials. The magnificent but sombre legends that describe the tragedies which occurred whenever the Rajput fort of Chitor fell before the armies of invading Moslems are still told in Rajputana and Kathiawar with proud enthusiasm ; of how, before the closing act of each tragedy, the hopeless sortie of the surviving warriors, their women committed mass suicide by *sati* (' suttee '), by throwing themselves into the flames of an enormous pyre rather than become the playthings of the conquerors. This form of general immolation was so well recognized among the Rajputs that it received a special name—*johar*. Tod[7] records that 13,000 females were thus sacrificed on the fall of Chitor in 1534 ; again, in 1568, when Akhbar after great efforts was on

[7] Tod, loc. cit. p. 363.

the point of capturing the same fortress, we learn that ' nine queens, five princesses (their daughters), with two infant sons, and the families of all the chieftains not at their estates, perished in the flames or in the assault of this ever memorable day '.[8] Greatest of all johars, if local historians are to be trusted, was that which occurred on the fall of Jaisalmer in 1295, besieged by the forces of Sultan Alau-d-din under Mahbub Khan. Tod records[9] that ' 24,000 females, from infancy to old age, surrendered their lives, some by the sword, others in the volcano of fire '.

To people nourished on such stories, emulation comes instinctively and so we find every here and there in Kathiawar, outside even of poverty-stricken hamlets, examples of memorial stones to devoted wives who committed *sati* in token of deathless devotion to their husbands. A flexed arm severed at the shoulder is the symbol which on these stones takes the place of the warrior-figure seen on memorials erected to heroes killed in battle (PLATE IV).

Many of these humble memorial stones to dead and gone village heroes and heroines stand neglected and forlorn but others continue to receive loving homage from their descendants—the Rajput cult of the ancestor and the hero still lingers though in greatly reduced strength. In the season of mourning, at the Kali Chaudas festival, these memorials are visited in order to feed the hungry ghosts of the dead and to paint the sculptured figures with vermilion, the latter an act of worship similar to that accorded to a deity ; the cumulative effect of this treatment accounts for the lack of detail noticeable in the photographs of four stones at Aramra (PLATE IV).

While these stones remain objects of veneration to the older villagers, nourished as they were on stories of Rama and Krishna and the glorious Rajput days of unquestioned ascendancy, the times are changing rapidly and, with the advent of the cinema, the Indian youth of today are better acquainted with the antics of Hollywood comedians than with the deeds of the heroes of their own land.

The old romance of local life, turbulent, virile, and adventurous, received its death blow when a British Assistant Resident took up his abode in the land, his hand made strong by the presence of a battalion of Indian troops under his immediate command. Since then a few soldiers have been posted nightly in each Vagher village to ensure that

[8] Tod, p. 381.

[9] ibid. p. 1214.

no men shall leave their homes to take part in the minor raids that alone are now possible. Today the Vaghers have settled down perforce to the hazards of an agricultural life, a hard existence indeed in a land where rainfall is scanty and where famine is an ever-present menace.

Although vanquished by British troops these wild Vaghers eventually came to consider themselves as protegés of Britain, and, as I have seen, disdained even to salute officials of the Baroda Government; their grief and indignation was intense when the Government of India some years ago withdrew the British Assistant Resident whom they regarded, to use the pregnant Indian phrase, as both ' father and mother of the tribe '. And yet in spite of this affection for British rule and justice, they refused the Resident's appeal to furnish recruits during the Great War. ' We will not go abroad to fight ', they said, ' but bring the Germans here to Kathiawar and every man will join your army '.

Neolithic Culture of the Hebrides

by Sir Lindsay Scott

THE publication of Dr Daniel's last essay on the typology of British chamber tombs[1] seems to make it desirable to offer such a note as present circumstances allow on the writer's excavations in the Hebrides, subsequent to the publication of his papers on the Rudh' an Dunain tomb in Skye and the Clettraval tomb in North Uist.[2] For to Dr Daniel the Hebrides are something of a mystery, and a good deal of an embarrassment, lying as they do between the Clyde group of tombs and the groups of Caithness and the Orkneys, and yet not playing the part that could be desired in any line of typological development. To Dr Daniel the area is one of mixed culture; but the explanation, though it may be true, is a little like a confession of uncertainty—a little like the late M. Reinach's ultimate explanation of Glozel. Fresh facts would, it is felt, be welcome.

Such facts as the writer can offer are derived from his excavation of the occupation site of Eilean an Tighe, North Uist, which was completed in 1938 and reported verbally to the Royal Anthropological Institute in January 1939;[3] and from his excavation of the chamber tomb of Unival, North Uist, which was completed in 1939.[4] The principal results of these and the previous excavations undertaken in the Hebrides has been to establish a time sequence of pottery types which links on to that established by Professor Childe's Skara Brae and Rinyo excavations in the Orkneys, and, in the light of that, to throw some measure of doubt on the two-stream theory of the typology of chamber tombs, or at least on that priority in time of the gallery grave over the passage grave which is usually associated with it. It is not the purpose of this note however to be drawn into the typological

[1] *P.S.S.*, 1941, pp. 1 to 49.

[2] *P.S.A.S.*, LXV, 188 ff; LXVIII, 194 ff and LXIX, 480 ff.

[3] Brief note in *Man*, Feb. 1939, p. 25; one of the restored vessels from this site was illustrated by Mrs Hawkes in *Journ. Arch. Inst.*, 1938, p. 139 and sherds in pl. v, p. 150.

[4] A note on a vessel from the site was published by the writer in *P.P.S.*, 1938, pp. 336 and 337.

controversy, which indeed has probably been carried as far as it can be by Dr Daniel's paper—and perhaps a little further.

The pottery sequence, which can only be indicated with dogmatic brevity in a note such as this, is derived from stratigraphy at Rudh' an Dunain and Clettraval, from evidence of the sequence of burials at Unival, and from evidence of the sequence of use of two pottery kilns at Eilean an Tighe. It is believed to be : first, undecorated Neolithic A with simple rims, and very rarely with lugs ; second, Neolithic A with developed rims, rolled over or externally bevelled, and grooved or incised decoration on the rim and upper part of the vessel ; third, Neolithic A with heavily developed rims, bevelled externally or internally, and elaborate grooved or incised decoration, together with some stab and drag and dotted decoration, all over the vessel—this group includes ' Unstan ' bowls ; fourth, groove and dot decorated ware of the type of the first period of Skara Brae together with beakers and (probably) food vessels. The relative dating of the last group is not determinable on the evidence, since the specimens only occur in the chamber tombs in late deposits which are not stratigraphically distinguishable ; it will be remembered, however, that the Skara Brae ware preceded a beaker at Rinyo.[5] The Eilean an Tighe series is limited to the first three (Neolithic A) groups but stops short (virtually) of stab and drag decoration (of which only two examples were found in over four thousand sherds), which predominates in the Unstan ware of Orkney. Dotted and stabbed decoration, extremely rare at Eilean an Tighe, occurs on later Neolithic A vessels at Clettraval and Unival. ' Unstan ' bowls occur only at Eilean an Tighe.

It will be appreciated that the preceding statement is a condensed and over-simplified one ; how much so will appear when opportunity permits of a full study of the great quantity of pottery found. The pottery sequence, which is completed by the plastic decorated types of the second and third stages of Skara Brae and the closely related early and elaborately decorated encrusted urns,[6] does however bear so close a relation to what little we know of the pottery sequence of the Languedoc-Pyrenean area[7] as to suggest continuous impact on the Scottish islands of the successive cultures of the West Mediterranean by the

[5] *Ant. J.*, 1938, p. 403.

[6] I have argued elsewhere that Sir Cyril Fox's encrusted urn sequence should be reversed, the elaborately decorated vessels of Ireland and Scotland being the earliest.

[7] P. Héléna, *Les Origines de Narbonne*, 1937. Mrs J. Hawkes, ANTIQUITY, 1934, p. 24 ff, and *Journ. Arch. Inst.*, 1938, pp. 138 and 154 ff.

Atlantic route. The highly decorated Neolithic A ware of the third group bears a very close resemblance, not however amounting to identity, to the Languedoc ware of corresponding position in the sequence. It also seems to represent, particularly in the decoration of a heavy, internally bevelled rim, a stage in the evolution of Scoto-Irish food vessel.[8]

In the light of this pottery sequence let us consider the type and date of construction of the three chamber tombs. Only a perverse ingenuity of definition can lead Dr Daniel to deny that Rudh' an Dunain is a classical passage grave with circular chamber, ante-chamber and short passage of the purest south Iberian type. Stratified under burials accompanied by a beaker were two Neolithic A bowls, one plain but with thickened and externally bevelled rim ; the other similar but with decoration on the external bevel of the rim. On the basis of the pottery this tomb may be placed early, but not certainly in pottery group 1; it must long have preceded the beaker period in which secondary burials were made in a chamber already silted to the depth of 12 inches.

' Clettraval ', to quote Professor Childe, ' might be described as a long cist, walled with slabs on edge and divided into five compartments by septal stones in the Clyde manner. But the compartments grow wider and higher towards the inner end till the innermost is 7 feet long by $5\frac{1}{2}$ feet wide by at least 6 feet high. And in one corner dry-stone walling filled the space between the upright blocks. The structure might, therefore, also be described as a chamber preceded by ante-chamber and segmented passage '.[9] It is placed in the pottery sequence by a straight

[8] There is a radical difficulty in the way of the derivation of the Hebridean wares by the Garonne route from Languedoc in that developed rims are exceedingly rare in the latter area ; only one example is known to the writer—an unpublished sherd in the Arles Museum from the Grotte des Fées. Organized patterns in the manner of Languedoc executed in groove technique are found round the estuary of the Tagus, though nowhere else in southern Iberia, and some of the vessels show fully developed rims which have become a vehicle of decoration. Prof. Childe, who has seen this pottery, very kindly confirms its similarity to the British wares, and on present evidence it seems to provide the most probable immediate source of the Hebridean styles of groups 2 and 3. It may none the less be that Languedoc is a more remote source; for there is some evidence of cultural contact between the Gulf of Lyons and the Tagus mouth by the Ebro-Jalon-Tagus route in the spread of Palmella bowls to Ciempopozuelos, Somaen and Catalonia, and the use of this route in the reverse direction would explain the origin of the groove decorated wares of the Tagus estuary better than the development of those wares from the vaguely scrawled groovings on the pots of the aborigines who lived in the Spanish caves.

[9] *Prehistory of Scotland*, p. 40.

sided, round bottomed, simple rimmed, double lugged pot from the floor of the chamber such as occurs in the lowest level of Windmill Hill and in the ' earliest ' Clyde gallery graves. That the innermost segment is in fact the burial chamber of a passage grave, as suggested by the writer in his report, can best be demonstrated by comparison with the Unival tomb.

This tomb is a passage grave with approximately round chamber and short, curved passage divided so as to suggest a vestigial antechamber. The (conventionally) southwest part of the chamber is occupied by a finely made cist, walled with thin slabs on its north side and east end, and floored with slabs sloping upwards from a flat area in the middle to both the head and the foot. Here burials were deposited crouched with head to the west and, when a fresh burial occurred, removed to the north side of the chamber. Vessels were placed at the head and foot of the cist and these also were removed to the north side of the chamber when a new burial occurred or else thrown out towards the entrance. Additional vessels may have been placed on the north side of the chamber contemporaneously with a burial, since one pot was found there intact and placed in a niche erect. The absence of parts of vessels from the tomb shows that fragments were removed, presumably as amulets by those whose duty it was to prepare the tomb for a fresh occupant. It will be appreciated that this burial rite (the dogmatism of the description of which must in present circumstances be pardoned) is identical with that disclosed for the eastern Mediterranean by the rock-cut chamber tombs of Cyprus in the third millennium and Mycenae in the second.[10]

The demonstration of the actual burial rite will be admitted as evidence of identity of culture outweighing arguments of structural typology. Now in reporting the Clettraval excavations the writer recorded slight structural evidence of a destroyed cist in the southwest part of the inner segment of the tomb and offered this evidence as a ground of belief that the inner segment was indeed the burial chamber, vessels found scattered in outer segments (apart from secondaries at a higher level) being assumed to have been removed from the chamber when it was necessary to prepare for another burial. This conclusion was by itself insecure, but it appears established by the discovery at Unival of a perfect cist corresponding precisely with the slight remains that survive of the Clettraval cist. Clettraval therefore was a passage

[10] P. Dikaios, *Archaeologia*, LXXXVIII, 1 ff, and A. J. B. Wace, *Archaeologia*, LXXXII, 121 ff.

grave in the significant sense that a chamber, approached by a passage, provided for burials in accordance with the rite which we know from the well preserved rock-cut tombs of the east Mediterranean; and this despite the fact that its long, segmented passage links it as regards methods of construction with the gallery graves of the Clyde.

Not less striking than the presence of these cists were other analogies of structure between Clettraval and Unival. In each the façade of the tomb, rising in height from its ends to the tomb entrance, was of otherwise unrecorded plan, namely in two straight lines bent back at rather more than a right angle to the tomb axis but with their extremities brought slightly forward. In each the north and south sides of the peristalith were straight. In Unival the west side was also straight and the whole enclosed area nearly square ; at Clettraval the west side was wholly destroyed by an Early Iron Age fort built immediately west of the chamber. If reliance is to be placed on structural typology more notable analogies could not easily be found ; yet the chambers are so diverse that Clettraval can be argued, on typological criteria, to be at least a near relative of the gallery grave.

Of the large range of pottery in Unival only one vessel would fall into Group 1, a plain bowl with simple rim of which fragments were found on floor level in the passage ; these lay beneath dry stone walling which had fallen early in the period of use of the tomb, for later neolithic sherds were found over it. The rest of the neolithic pottery belonged unequivocally to Groups 2 and 3 and it would be reasonable to place the construction of Unival a little later than that of Clettraval. The sequence of kilns at Eilean an Tighe, which may well have provided the pottery for both tombs, is not such as to suggest a difference of time of more than one or two generations between Groups 1 and 2, though *a priori* arguments as to the time difference of occupation levels are of course open to error.

It may thus be said of Clettraval and Unival that they represent the same funerary rite and show the same sequence of pottery types—not improbably drawn from the same kilns. Lying on twin sites on terraces below the summits of neighbouring hills they possess in common such abnormal structural features as to suggest that they were constructed by successive generations of the same social group. Yet on current typological criteria the two tombs might be regarded as examples of two streams of migration separated both in space and time.

The antinomy may be evaded, and perhaps rightly evaded, by regarding the Hebrides as an area of mixed culture. It is to be borne

in mind however that we are dealing here with no outlying area where a culture developed in isolation ; the islands lie in the main stream of sea traffic along the Atlantic route. Their pottery sequence, linked with that of the Orkneys, shows a correspondence with what we know of the West Mediterranean sequence that seems to argue for continuous movement along this route from the latter centuries of the third millennium to the middle centuries of the second. It may be that this movement included two entirely separate chamber tomb cults derived from different Mediterranean sources at different times, and that the two streams coalesced in space and time in the Hebrides to form a single culture. It may be so ; but if this is to be argued it should be argued not merely on the strength of typological concepts of ' passage graves ' and ' gallery graves ' but from consideration of all relevant cultural traits in the regions and the periods concerned.

Some South Pembrokeshire Cottages

by Sir Cyril Fox

In 1937 the writer described in Antiquity a series of cottages—the dwellings of crofters—in Llanychaer and adjacent parishes of northern Pembrokeshire.[1] These were two-roomed stone structures with a central doorway on one side : the door opened into the living room where the most striking sight was the great open fireplace at the gable end, the chimney structure of which projected into the room. A number of such dwellings has recently been examined in a coastal district of the same county to the south of Milford Haven, in Castlemartin parish. These show variations in the character and plan of the open fireplace, which are of interest, and probably also of cultural significance ; they also provide fresh evidence of the hearth-dairy association manifested at Llanychaer.

The district (fig. 1) is a plateau of Carboniferous limestone a hundred feet or more in elevation, flanked by a valley opening to the sea north of Linney Head ; here is an extensive tract of blown sand and turfy dunes.[2] It was largely arable country, but is now (1940) pastoral. Large farms, each representing an ancient settlement, are characteristic, and the crofts are interspersed with the farms. The decay of the croft-system is more advanced than at Llanychaer, all the cottages to be described being deserted or in ruins.[3]

Cottages with external gable-chimneys

One series, whose chief—or only surviving—characteristic is a chimney stack at one gable, is exemplified by Lake, a ruined cottage in the sandhills within a boundary bank defining a patch of cultivation. Both gables and parts of the side walls survive, and show that it was planned internally as a simple rectangle (plate 1a and fig. 2) measuring

[1] ' Peasant Crofts in North Pembrokeshire ', 1937, pp. 427–40.

[2] The character of this countryside has been well described by a geologist, A. L. Leach, f.g.s., in *Archaeologia Cambrensis*, 1913, p. 394 ff.

[3] Of the houses mentioned, Lake, Castle Lady, Slade and Frainslake are marked and named on the 6-inch Ordnance Survey map, sheet xlii nw.; Cuckoo Rock is marked and named, and Old Trenorgan is marked (700 feet sse of Southrow) on sheet xlii se.

27 feet 10 inches by 12 feet 11 inches and with its long axis east and west, and that the eaves of its roof were only 6 feet above the ground. These measurements and proportions are closely paralleled in the north Pembrokeshire croft-cottages, and we can reconstruct its interior from experience there acquired : we can assume a kitchen and a bedroom divided by a wooden partition, with a front door centrally placed in the south wall and flanked by windows. The bedroom may have been

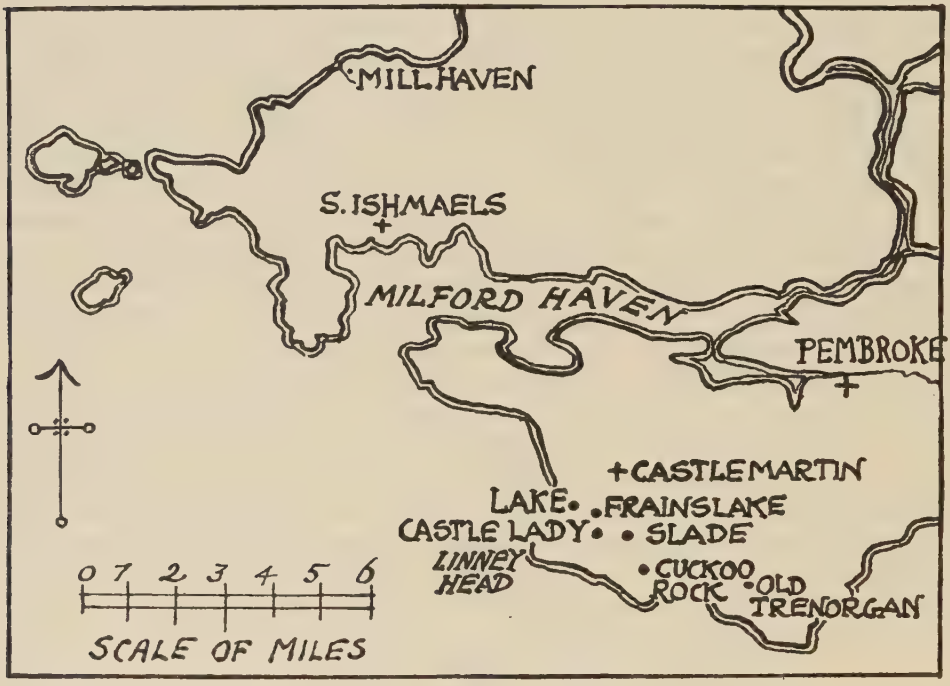


Fig. 1

ceiled, in which case there was an unlighted loft over it, reached by a moveable ladder, as at Frainslake (fig. 4). The original position of the dairy in such a cottage as Lake is not known, but the lean-to on the north side (see fig. 2) was almost certainly added for this purpose (see p. 315).

The gable wall of the living room at Lake is flat, unlike any of the Llanychaer cottages ; the chimney structure incorporates much of the gable wall, but is mainly outside it. The deep-set hearth for cooking has a comparatively low opening (4 feet 6 inches). This can be

seen in the photograph (PLATE I, A), but it is the massive external chimney which rivets attention. The shaft is central to the gable as the elevation in FIG. 2 shows, but the stack is not. One side of the projecting mass is vertical, with one ledge or offset, emphasized by a dripstone, half-way up. The other side is vertical to the first offset, there is then a long slope interrupted, and ended, by similar offsets. We have now reached the chimney shaft ; it is nearly 5 feet square, and has a cornice and a rounded cap. The effect on the mind of the passer-by of such a structure, isolated in a waste of sand and marram-grass, transcends its modest scale ; it is in a true sense monumental, showing what a sound tradition in vernacular architecture, using nothing but the coarse building-stone locally available (Carboniferous limestone) can accomplish by means of good design and proportion.

All these points are brought out in the two illustrations of Lake ; it is further to be observed that the house gable has a bold internal offset intended to house the roof and roof-framing. Moreover, as in the case of all buildings of the kind which I have seen in Pembrokeshire, a bread oven has been incorporated in the fireplace ; here the stone structure (partly visible in the photograph) is built outside the stack as a half-dome, access from the hearth being provided by a hole knocked through the wall.[4]

Two other cottages belonging to this series are here illustrated. CASTLE LADY, close to a fine multivallate fort presumably of the Early Iron Age, which gives the croft its delightful name, is a tiny structure, as the photograph (PLATE I, B) shows. The figure is standing by the (blocked) doorway, which is only 4 feet 6 inches high. There is a lean-to on the opposite side, entered by a door near the hearth ; identified as the dairy. Small as the present house is (22 feet by 14 feet internally) it represents an enlargement of the structure for which the chimney was built, which was only 10 feet wide.

CUCKOO ROCK : this croft, in an idyllic setting of thymy lawns, rock outcrops, and bird-haunted woodland, need not detain us long. The surviving antiquity (PLATE II) is an amusing example, which might deceive the unwary, of a chimney turned inside out. The opening of the original fireplace on the right of the photograph, below the gable offset on which the roof of the destroyed cottage rested, is masked by the bread oven (roofed with small slates) of the later cottage which

[4] An identical development can be seen on the opposite side of the Bristol Channel, e.g. at Bossington, on the borders of Exmoor, in houses of comparable date.

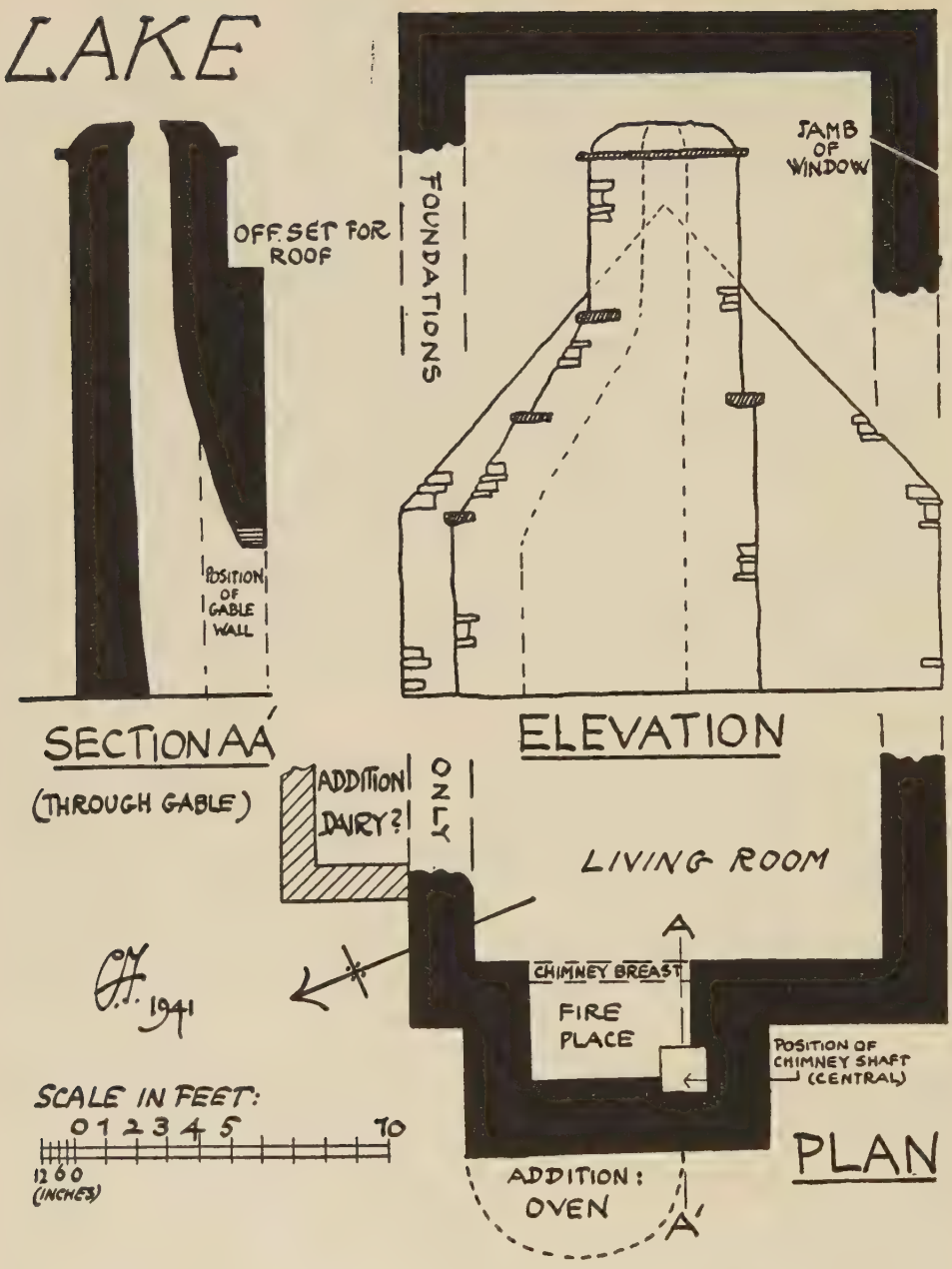

LAKE
OFF SET FOR ROOF
POSITION OF GABLE WALL
SECTION AA
(THROUGH GABLE)
FOUNDATIONS
JAMB OF WINDOW
ELEVATION
ADDITION DAIRY?
ONLY
LIVING ROOM
A
CHIMNEY BREAST
FIRE PLACE
POSITION OF CHIMNEY SHAFT (CENTRAL)
PLAN
ADDITION: OVEN
A'
1941
SCALE IN FEET:
0 1 2 3 4 5 TO
12 6 0
(INCHES)

Fig. 2

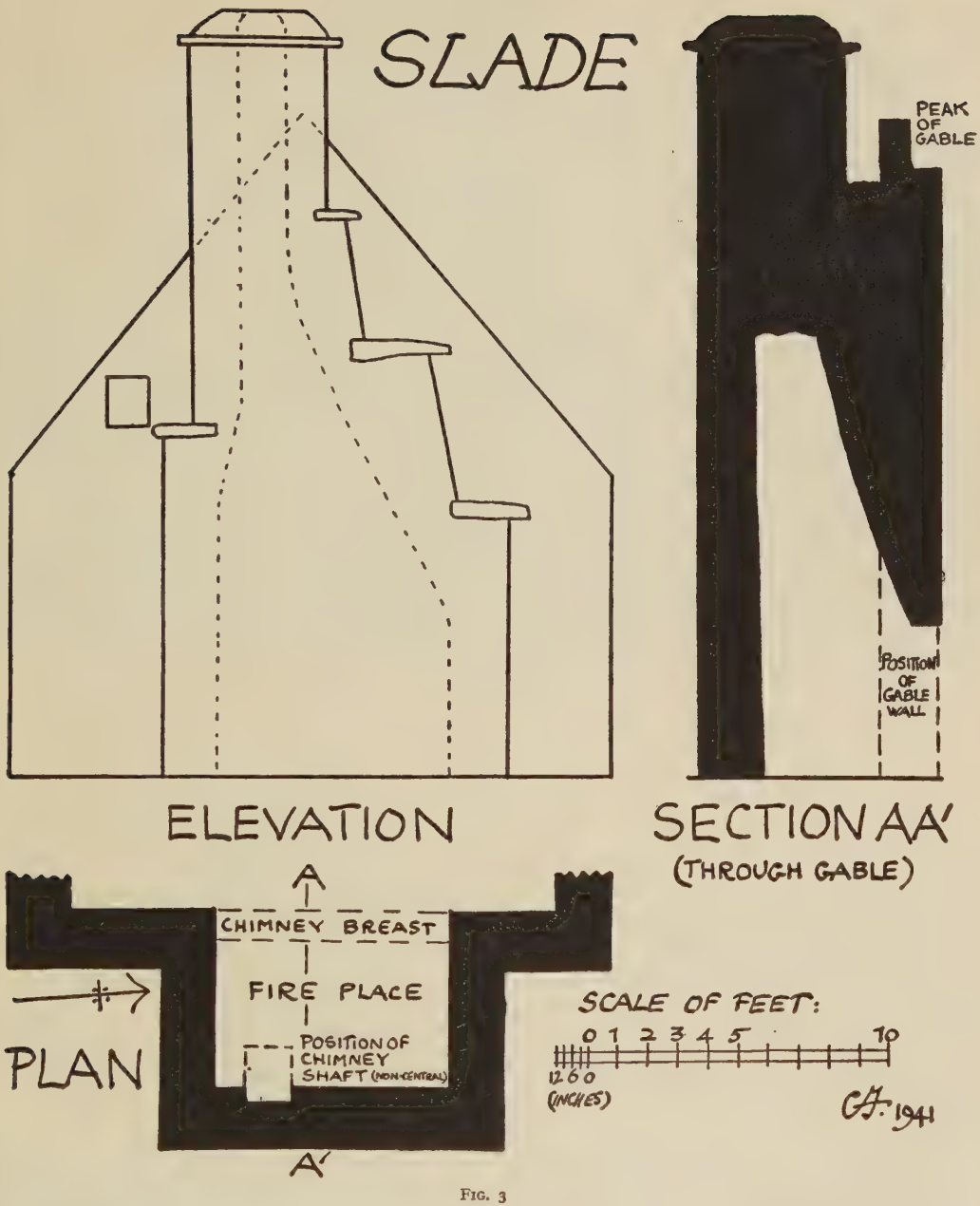

SLADE
PEAK OF GABLE
POSITION OF GABLE WALL
ELEVATION
SECTION AA'
(THROUGH GABLE)
A
CHIMNEY BREAST
FIRE PLACE
POSITION OF CHIMNEY SHAFT (NON-CENTRAL)
PLAN
A'
SCALE OF FEET:
0 1 2 3 4 5 10
12 6 0
(INCHES)
GA. 1941

FIG. 3

has been built on the other side of the structure. A cavernous hole 4 feet wide has been pierced in the back wall of the original hearth for the fireplace, 4 feet 3 inches deep, of this cottage (PLATE III, A); how anyone could cook in such a dark hole, or how from it heat could be effectively diffused into the room, is difficult to imagine. No other fireplace I have seen is deeper than its breadth (for comparative measurements see footnote 5 on page 314. Cuckoo Rock shows that in the Castlemartin district the tradition of the open hearth was clung to with remarkable tenacity, for the new cottage is of 19th century date. It has not long been deserted, and yet no trace of a built-in grate, such as was seen in most of the Llanychaer cottages, is present. The door on the left of the fireplace in the photograph leads to an annex which, on internal evidence, was the dairy, thus placed immediately adjacent to the hearth.

The type of chimney seen at Lake, Castle Lady, and Cuckoo Rock is not confined to Castlemartin parish. I have noticed cottages similarly planned at St. Ishmaels and other places on the north side of Milford Haven, and have little doubt that adequate investigation would show it to be a common structural form in southern and south-western Pembrokeshire. Moreover, it is not confined to the *cottages* of the Castlemartin district. Here, as elsewhere, the humble croft may be regarded as the simplest expression of a mode of building employed in the dwellings of the folk generally. One example of this mode in particular provides clues to its origin and descent. Of the ruin known as SLADE there survives the chimney gable and sufficient of the side walls to indicate the breadth of the house of which it formed part (16 feet). The chimney breast, not a wooden beam as in the crofts, but a flat arch of stone, has collapsed. Slade, unlike our cottages, had attic rooms, as is rendered probable by the height of the side walls, and proved by a window in the gable. The remains are illustrated in FIG. 3 in the same manner, and to the same scale, as Lake, and so the figures, which face each other, graphically indicate the difference in size. It will be seen that the shape of the chimney structure is similar to that of Lake, and the offsets are similarly disposed; but at Slade these are remarkable in scale, one forming a ledge over 2 feet broad. Two features differentiate the design from that of Lake. The chimney shaft is eccentrically placed in relation to the gable, and, as the section indicates, and the illustration (PLATE I, A, *inset*) demonstrates, the peak of the gable stands free. Thus there is a sloping stone gutter, shaped like an inverted V, between shaft and house wall.

(A) LAKE, SEVENTEENTH CENTURY, FROM THE NORTH

The opening for the fireplace is seen on the left, and on the right is the massive chimney with three offsets on its sloping flank. Beyond the chimney stack is seen the curve of the (later) bread oven. *Inset:* Slade, sixteenth century, chimney stack and peak of gable

(B) CASTLE LADY: ROOFED WITH THE SMALL STONE SLATES CHARACTERISTIC OF THE DISTRICT

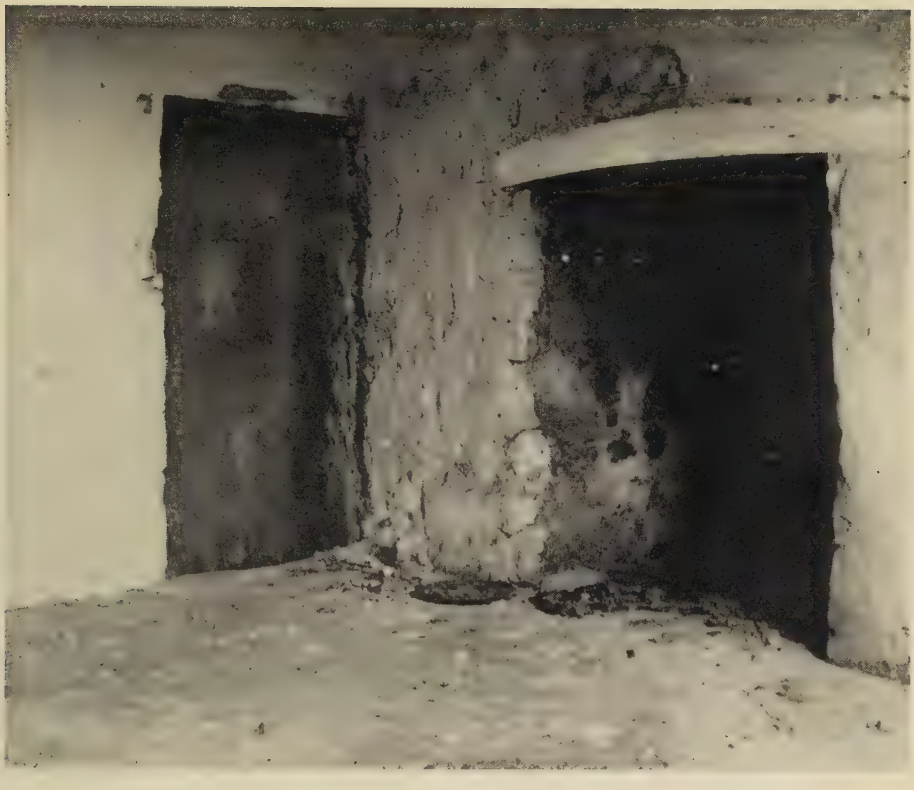
The low (blocked) doorway of the seventeenth century cottage prior to enlargement is seen on the left of the figure

facing p. 313

PLATE II

CUCKOO ROCK

The chimney, seventeenth century, shows on its right an offset for the roof of the (destroyed) cottage. On the left a later cottage, the roofed oven of which partly covers the original fireplace opening



(A) CUCKOO ROCK: A LIVING ROOM OF THE NINETEENTH CENTURY
On the right the fireplace opening, on the left the doorway to the dairy, in a lean-to

(B) FRAINSLAKE, LATE EIGHTEENTH CENTURY
showing on the left the wall-top (6 ft. high) and the projecting fireplace with one offset, on the right the dairy recess with the joist-holes of its ceiling

OLD TRENORGAN

an early eighteenth century farmhouse with attic bedrooms : the living room has an internal stepped chimney structure, and on the left is the doorway to the dairy

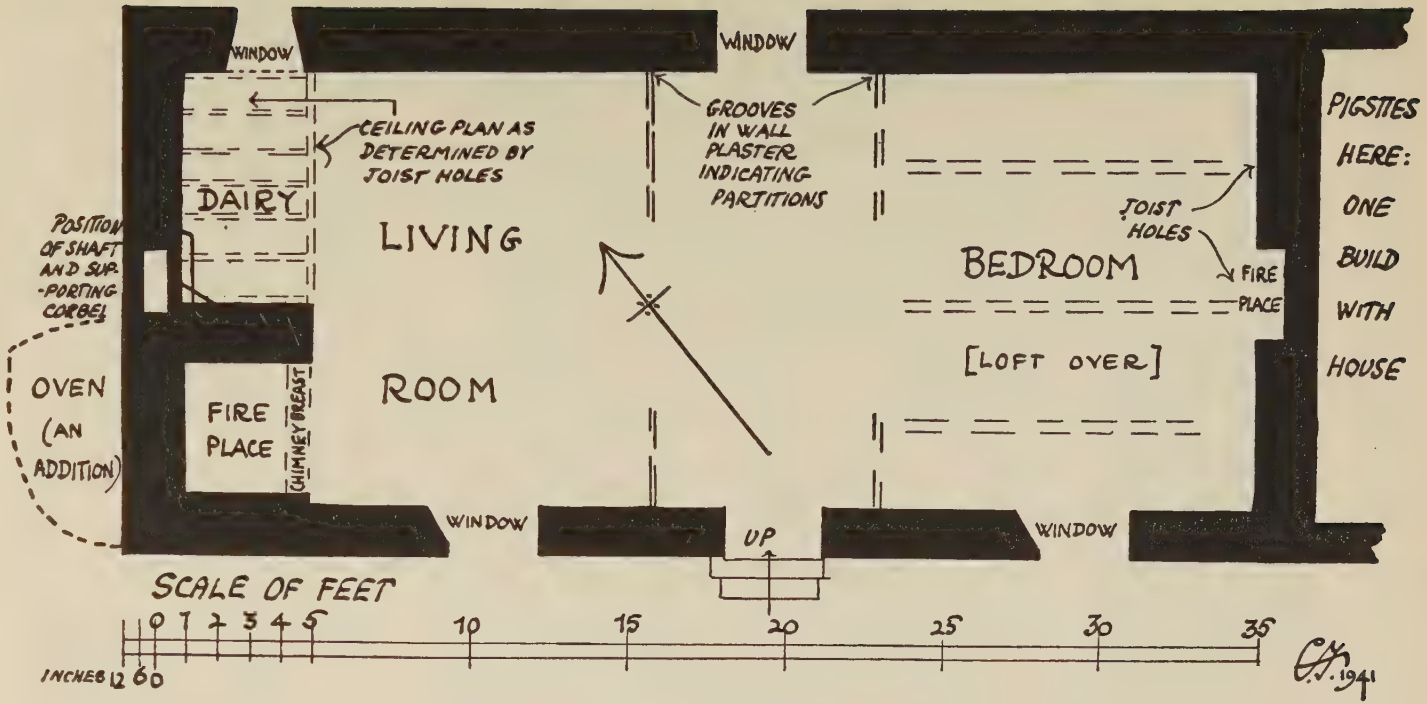


FIG. 4. FRAINSLAKE, PLAN

These features have a Gothic flavour; they indicate that Slade represents an earlier stage in the evolution of the south Pembrokeshire type of external chimney than does Lake and its fellows; if Lake, as I think, be 17th century, Slade can safely be placed in the 16th century.[5]

The asymmetry in elevation of all the examples studied is doubtless in order to avoid rain drops falling down the flue on to the fire, which in the Lake and Slade drawings should be placed halfway between the dotted lines.

Cottages with internal gable-chimneys

FRAINSLAKE: in addition to the type described in the preceding section, we find in the Castlemartin district croft-cottages with an internal chimney structure resembling, but not identical with the north Pembrokeshire series already referred to. Frainslake is here illustrated, and, as FIG. 4 shows, the ruin yields evidence of its design as a *croglofft* dwelling. It is somewhat larger than any one of those studied at Llanychaer, the internal measurements being 34 feet 4 inches by 13 feet 9 inches. Though late (*c.* 1780 ?) the structure was not late enough to have a contemporary bread-oven; there is the usual addition for the purpose, at the back of the hearth. As at Llanychaer, a piece of wreckwood provides the breast-beam of the chimney. The chimney structure projects 4 feet into the room, the peculiar feature being the compression of the hearth into a corner of the gable end of the kitchen, with the consequent difficulty of carrying the flue into a central chimney-stack. This is clearly shown in PLATE III, B, where the shadow at the top of the projection is caused by the corbel which helps to support the stack. The fireplace is 4 feet wide by 3 feet 9 inches deep. This curious plan deserves consideration.

The hearth-dairy association

There can be no doubt that the compression of the hearth at Frainslake is to give ample room for the dairy, the ceiling-joists and bench of which are indicated by marks on the wall plaster—shown in the photograph. The identical plan with inconveniently

[5] The following are the measurements, on plan, of the chimney structures described in this section:

	SLADE		LAKE		CASTLE LADY		CUCKOO ROCK	
	ft.	in.	ft.	in.	ft.	in.	ft.	in.
Overall breadth	11	3	9	6	8	0	9	9
Overall depth	7	10	6	0	6	0	5	4
Fireplace breadth	7	8	5	1	4	3	4	0
Fireplace depth	5	10	3	9	4	0	4	3

twisted flue is to be seen in a ruined cottage near Broadmoor, Mill Haven, north of Milford Haven, which is another illustration of the community of culture in the districts of Pembrokeshire which flank that deep and broad estuary; today an obstacle, then, no doubt, a means of communication. As was emphasized in the paper already quoted the dairy was consistently next to the hearth, and in this position, in the north Pembrokeshire cottages.[6] The principle of hearth-dairy association then, was widely established, and has here influenced structural layout to an extreme degree. It should be noted that in the Castlemartin houses, where no recess, or no adequate recess, for the dairy was present adjacent to the hearth, a lean-to was afterwards provided in this position. Such a dairy is indicated in PLATE III, A, the desolate and forbidding kitchen interior of Cuckoo Rock. Again, the dairy is adjacent to the hearth in Old Trenorgan, a small farmhouse in Bosherston parish (PLATE IV). And, as we have seen, there was a lean-to in a similar position on the north side at Lake, which has thus, with reason, been identified as the dairy. So there was at Castle Lady. We may take it, then, that the hearth-dairy association was general in the Castlemartin as in the Llanychaer district, in the 18th and 19th centuries.

CLASSIFICATION OF SMALL GABLE-CHIMNEYED HOUSES

A recent writer, recognizing the need for classifying our ancient buildings of simple character, if progress in their study is to be made, differentiates between central-chimneyed, and gable-chimneyed, houses.[7] This is well; but in the latter group it seems necessary to go further and I would like to state a case for creating two sub-types, the first (A) including gable-chimneyed houses with a hearth *inside* the gable wall, the second (B) gable-chimneyed houses with a hearth *outside* the wall. We are but little concerned with the former, and a brief indication of its descent, together with an indication of the place in that descent of our 'stepped' structures, will suffice.

SUB-TYPE A, INTERNAL

The origin and development of the chimney in Britain has been studied by several writers, and the main course of evolution is established. One of the most primitive forms is common in Wales today; it is partly

[6] An historical deduction from this fact, suggested in ANTIQUITY 1937, pp. 438–9, is questioned by Dr I. C. Peate, in *The Welsh House*, pp. 108–11. I hope to discuss the point raised by him elsewhere.

[7] Åke Campbell, 'Notes on the Irish House', *Folk liv.* 1937, p. 207.

built up against, and partly above, the gable wall, having a wood-framed and wattled hood lined with clay, and wattled flue protected by thatch. The structure and appearance of the hood are well-known to students ; Dr I. C. Peate has a good photograph of one in ' The Welsh House '.[8] This kind of chimney was formerly in general use throughout Britain, and the hooded fireplaces of the Middle Ages (the earliest known examples of which are in Norman keeps of the 12th century) are but translations of such wooden structures into stone. Transitional forms, partly of wood and partly of stone, of the 13th and 17th centuries survive ; examples in Shropshire, Westmorland and Cumberland have been published. In Ireland Åke Campbell's researches suggest that the internal chimney is the only type known to the folk, and that its descent is on the same lines as in the Highland Zone of Britain.[9] It seems to me probable that the stepped *internal* chimney structures of the Pembrokeshire cottages (and farmhouses) which might be described as ' stuck ' on to the inner face of the gable wall, and which are best illustrated in this paper by OLD TRENORGAN (PLATE IV) are also adaptations, in this case to a simpler masoncraft, of the wooden hood and flue. It is easier for the mason to obtain the necessary contraction of the chimney stack on the working face by set-offs than by a slope.

SUB-TYPE B, EXTERNAL

It is curious that so little attention has been directed to the problem of the external gable-chimney—indeed, I have failed to find in the literature any synthesis of its plan, structure, or origin. The writers to whom I have referred seem to consider that the subject of chimney-evolution is exhausted when the internal chimney has been dealt with. We must therefore approach the matter in an elementary fashion.

The gable hearth was, in a house such as Lake, the only fireplace in the dwelling. It had therefore two functions, that of keeping the occupants warm and that of cooking their food. The hearth external to the gable would appear to be less efficient for the former purpose,

[8] ' The Welsh House ', *Y Cymmrodor*, vol. XLVII, plate 81.

[9] This summary is based on Innocent, *The Development of English Building Construction*, 1916, pp. 265–70 (the chimney and its descent) and fig. 73 (Norman fireplace) ; Nathaniel Lloyd, *A History of the English House*, 1931, p. 347, fig. 558 (flue of timber and stone, Lancs.), p. 434, text, and figs. 762 to 765 (early hooded fireplaces) ; Royal Commission on Historical Monuments, *Westmorland*, 1936, p. LXI and plate 33 (Langdales 4) ; Åke Campbell, ' Notes on the Irish House ', *Folk liv*, 1937, esp. pp. 230–233 and pls. XLI, 2, XLII, 2, and fig. 6.

since three sides of the enclosing structure are exposed to the outside air, and much heat is dissipated. When this defect is considered, it would appear that necessity rather than choice must have secured its original adoption, and that its survival is due to conservatism.

Local parallels require attention before we go further afield, and the superficial similarity of the substructures of the famous round chimneys of Pembrokeshire, well published by Romilly Allen[10] is evident. But these flank the long axes of the farmhouses, and they probably belong to a different tradition, that of the medieval hall, when its fireplace had shifted from the central hearth to the side-wall. Again, they tend to be symmetrical in elevation, and do not present the low cavernous entry characteristic of our type.

Slade, being the oldest local representative of sub-type B, may provide us with ideas. The free-standing gable here, and the great depth of the cooking place—there is nearly four feet clear of the flanks of the house wall as the section and plan show—suggests that the external hearth arose as a means of *isolating the fire and the flue from contact with the gable* of the building.

What could have rendered this necessary? It seems to me that there are two possibilities; it was done to obviate the technical difficulties of preventing leaks when a chimney-stack pierces a roof; or to meet the demand for fireplaces at the gables of wooden buildings.

At this stage it will be convenient to pause for a moment. I am well aware that every gradation, viewed from the *inside*, from the prominent projecting chimney at Trenorgan, to the flat wall at Lake; and, viewed from the *outside*, from the hardly measurable projection on the gable wall that does no more than define the existence of a chimney, to the massive and well-nigh independent structures such as Slade illustrates, can be found in ancient buildings in Britain; and that it is open to anyone to assert that my so-called types have but a single origin, being no more than either extreme of an unbroken series. This may be; for the field of study is very extensive and (as we have seen) has not been cultivated. But a reasoned statement of the case for dual origin, with intermediate forms explained as due to the long-continued association in the same countryside, of the two types, is a necessary step towards the ascertainment of the truth.

Let us consider the suggestion that the external gable-chimney was first associated with wooden houses. This means that the device

[10] *Archaeologia Cambrensis*, 1902, pp. 1–24; many illustrations reproduced by I. C. Peate, op. cit.

was evolved in a forest region, and that—to turn to our local problem—either before or after its adaptation to stone building it was carried by immigrants to south Pembrokeshire.

The Welsh Marches immediately come to mind as a possible area of evolution. Here wooden building is not only widespread and highly developed, but demonstrably of very ancient origin.[11] Stone chimneys of marked projection are in this belt of country associated with timber-framed buildings ; many massive specimens, for example, are planned and described in the Royal Commission on Historical Monuments' survey of Herefordshire. We have here, it is true, no early examples of what I conceive to be the primary form—a hole in a timber house-wall with a stone fireplace and shaft for the flue built wholly on the outside ; but the principle is illustrated in a series of 16th and 17th century wooden cottages in the county. In some cases the chimney stacks are set clear of the wooden gables.[12] The technique is probably to be met with wherever, in these islands, wooden building is indigenous ; there are examples in Essex, one of which, a cottage of the 16th century at Great Tey with a contemporary brick chimney bears a resemblance in form (3 offsets on one side, one on the other) to Slade.[13] When it is recalled that the conquest of Dyfed in 1093, resulting in the establishment of the seat of administration of the new province at Pembroke (see FIG. 1) was initiated by Roger Earl of Shrewsbury who controlled a region where timber houses like those so well recorded from Herefordshire are characteristic, it would appear likely that the hint given by the Slade details has provided the answer to our question.

The alternative, that the chimney with the shaft clear of the gable was designed to obviate the risk of water dripping down the faces of the shaft into the house, imposes less limitation in our search for origins ; the device may have come from any part of Britain where the external gable-chimney is found. Having regard then to the persistently close cultural connexion between Somerset and South Wales, I should be inclined to look to the Exmoor region as a probable proximate focus of origin. Here, as Dr Peate has indicated[14] the round chimney of

[11] It was highly developed in the 12th century, as the Bishop's Palace at Hereford (*R.C.H.M. Herefordshire*, vol. 1, pp. 116–7) and the stone details derived from wooden forms in the church at Kilpeck (*Arch. Camb.* 1927, pp. 460–3) show.

[12] See e.g. cottages at Lucton and Eardisley, *R.C.H.M. Herefordshire*, vol. III, pls. 27 and 30, and a house at Birley, op. cit. pl. 24.

[13] See *R.C.H.M. Essex, North-East*, opp. p. 177.

[14] op. cit. p. 164.

Pembrokeshire finds a close parallel; and here the gable-chimney of stone with asymmetrical offsets, associated with mud-walled thatch-roofed cottages and farmhouses, can be seen. I have not however found such chimneys with the marked projection which characterizes Slade and Lake.

Conclusion

The problem of the external gable-chimney, it is evident, is still far from being solved. If it represents, as I am inclined to hold, a separate line of evolution, at what stage in the history of the chimney did it first appear? and in what region or regions? That it was a later development than the internal gable-chimney seems probable, for the early stages of this sub-type are very primitive, whereas the external chimney must have been from the beginning a product of skilled craftsmanship in stone or brick. Since we do not yet know what the motive for the development was, or with what type of building construction it was first associated, it is not possible here to do more than note that the widespread distribution of a characteristic feature of our Pembrokeshire chimneys—the presence of three offsets on one side and one on the other, producing an asymmetrical elevation—is in favour of diffusion from a single centre. Research on the external gable chimney, particularly field-work (more extensive than war-time conditions permit) on examples that appear primitive, is required, and the possibility that the enquiry will have to be extended to the continent must be envisaged.[15]

[15] Penfro, in which the Castlemartin houses are situated was, as is well known, colonized by Flemings in the reign of Henry I. Flanders, for this and other reasons, seems a likely Continental region. I put this point to my friend Mr A. W. Clapham, President S.A., who remarks, 'I think that your note about the Flemings may be cogent, but I very much doubt whether any evidence bearing on this subject, apart from possible literary sources, survives in the cockpit of Europe'.

The 'Hurrian' Language: a review

by Sidney Smith

Introduction to Hurrian. By E. A. Speiser. (The Annual of the American Schools of Oriental Research. Vol. xx for 1940-1). *New Haven*, 1941.

DECIPHERMENT is always exciting, much as mathematical problems or word-puzzles are: and I have found this book exciting, though exceptionally stiff, reading. There are three or four forms of this intellectual pursuit of decipherment. Perhaps the most spectacular is the discovery of how some unusual script, such as Egyptian or Hittite hieroglyphs, is to be read. Most interest attaches to the discovery of what the words and sentences of an unknown language written in a known script may mean, for that may open a new source of information. But the form to which modern scholarship is most attached is the establishment of grammatical rules, the formulation of an accidence or whatever may correspond to that branch of grammar in the new language, and sometimes to a disquisition on a subject that seldom occupies much space in English, but invariably, under the title *Lautlehre*, a great deal of room in German, grammars. This last form is most exciting where there is no traditional grammar and therefore no accepted terminology of long standing, and each step in the understanding of a construction is only taken after various possibilities have been explored—preferably by others—and rejected. It requires great acuity in combination, discrimination in distinguishing the phenomena, and severe discipline in the ordering and statement of conclusions. The subject of this review is a remarkable essay in this last form.

When the documents found at Amarna in Egypt were published, decipherers immediately began to work at the unknown language in which a king of Mitanni wrote to a Pharaoh of Egypt about 1350 B.C., and began to publish in 1890 essays in which grammatical analysis and attempts to interpret the meaning of the text were nicely balanced. In 1899 Messerschmidt, in his *Mitanni-Studien*, gave tentative translations of quite long passages and studied the grammatical forms as they occurred in the text. Since the publication of texts from Boğazköy, from 1920 onwards, showed that the language of this letter was called

'Hurrian' by the Hittites, there has been a steady increase in the material from other excavations. Renewed analysis of the language has been based on new facts. Now we are presented with what Professor Speiser calls 'a tentative correlation' of 'a body of data regarding the phonology, morphology and syntax' of this very odd tongue. It was spoken in northern Mesopotamia, the region between the Euphrates and Tigris north of Der-ez-Zor, and east of Tigris, in the Kirkuk area, earlier than 1800, almost certainly much earlier, till 1200, or not much later, and in parts of Syria and perhaps Palestine between 1500 and 1200 B.C. The language is quite unrelated to any large family; only one ancient speech at all resembles it, and that is Urartian. The available material, in different forms of cuneiform script, consists of: (1) the long letter from Amarna; (2) a syllabary found at Ras Shamra, giving translations of words into Akkadian, of about the same date; (3) some passages in Hittite texts, generally of a religious or mythical content, of the late 14th or early 13th century; (4) some religious poems, from Tall Hariri, the ancient Ma'er, written down in their present form about 1800 B.C.; (5) a few texts, of miscellaneous character, from Ras Shamra, in the cuneiform alphabet peculiar to that place; (6) isolated words in the texts from Nuzu recording business and legal affairs, dating roughly from 1450–1350. Add to this names in tablets from Cappadocia which belong to the 20th and 19th centuries, from Dilbat in southern Babylonia, of the 19th–16th centuries, and in the Amarna correspondence of the early 14th century, and that is the total of the remains now available where 50 years ago there was only the single tablet.

We are told in the preface that the original plan of the book included a chrestomathy and a glossary, and that these may appear as a separate volume at some future date. Till that happy day, students will not find it easy to find out how to analyze a Hurrian sentence, and the test of the work is that. It would have been well to include short examples of continuous text that exemplify the main features, with an analysis enabling the reader to grasp the main points and referring him to the relevant sections of the exposition. I have found it extremely difficult to collect the information enabling me to understand Speiser's view of any one sentence, and I advise those who may wish to do so to start, after reading the Introduction, with the last chapter, 'Construction', and to have Messerschmidt's book beside them. While mastering that chapter they will be guided by cross-references to chapter IV, 'Morphologic Elements', and they may also require to look up chapter

II, ' Orthographies and Pronunciation ', to understand Speiser's ' normalised ' transcriptions. Chapter III, ' Phonology ' had best be left till the rest is digested ; only those who have greater faith, or perhaps made more progress with the study, than I, will avoid a complete scepticism that might prove unfair to the rest of the book.

The real basis for the interpretation of this language remains the letter from Mitanni ; to show the advance in analysis made by this book, much of which follows the lines laid down by others, though sometimes with a divergence, I shall quote examples that will possibly serve to show some of the many peculiarities of Hurrian. In 1889 Messerschmidt (pp. 8–9) guessed at part of the meaning of this passage :—

(m)Gi-li-i-aš-ša-an pa-aš-ši-it-ḫi-ip-pi-uš ti-pi an-ti gu-lu-u-ša
Und Gilia mein Bote hat . . . Wort gemeldet

This translation is based on facts and resemblances in the Akkadian letters from Amarna. Gilia is known to have been an envoy, and parallel passages have the phrase ' to say a word ' or the like. Messerschmidt deduced that *-an* was a connective particle, that the *-šš-* of *Giliaššan*, and the *-š* of *paššithippiuš* were a nominative case ending for the subject, that the *uša* in *guluša*, marked perfects of verbs, and that the *-ppi-* in *paššitḫippiuš* was a first person singular pronominal suffix, as Sayce had pointed out; *tipi* he considered a noun, not declined. Speiser changes the transliteration *-ip-pi-* to *-iw-wu-*, of *tipi* to *tiwe* and of *Gi* to *Ge*, and translates, p. 176, ' and Keliya, my envoy, has told this word ', so that the meaning assigned to the passage remains the same, and the only addition appears to be the translation of the demonstrative. That is typical ; the sense given to a passage by Speiser rarely differs very much from that given by his predecessors, though he sometimes adds to their interpretations. But his grammatical analysis is widely different. The *-š* marks an ' agentive ', used ' only in constructions involving transitives accompanied by both logical subject and object ' (pp. 108–109). The noun *tipi* is in the ' subject-case ' which ' is characterized by the absence of a special suffix ' (p. 106), and *anti* is a deictic pronoun agreeing with *tipi*. The suffix of the verb, which marks what is probably, as Messerschmidt thought, a perfect, is *uš*, not *uša* ; the ending *-a* of *gul-uš-a* is ' an indication of the agent included in the predicate, a pronominal element agreeing with the agentive ' (pp. 160–61). The sentence we are considering then has the grammatical form ' Gilia-by-and messenger-my-by word this speak-(perfect)-by him '. The passive construction, but not of course

the other points, will remind the Semitic scholar of modern Aramaic dialects which tend to express action by passive participles and agents marked by prepositions. Curiously enough, I am told that in modern Armenian the normal active constructions of the classical language are commonly replaced by passives. There is a similar tendency in colloquial Arabic, e.g. *'andi ma'lum*, 'with me known', for 'I know'. The analysis of this sentence shows one set of peculiarities, and the change effected in analysis between Messerschmidt and Speiser. The reader is left to surmise why some stress is put on the differentiation of perfect and past tenses. Did Hurrian recognize the distinction?

Here is an example that shows the same passive construction in the future tense, and includes a peculiar type of pronoun :—

i-i-e-na-a-ma-a-ni-i-in (m)Ma-ni-eš (m)Gi-[li]-ia-al-la-a-an
ka-til-li-ta

Speiser (p. 188), translates 'and, *-ma-*, such (things) as, *yena*, will, *-ed-*, indeed (?), *-nin*, be, *-lla-*, told by Mane and Keliya'. The verb is *kad* or *kat*, with a root-complement *-ill-* (p. 134), perhaps with an emphatic significance (p. 138). This is followed by *-it-*, regarded by Speiser as a writing for *-ed-*, which marks a future (pp. 143–4). The ending *-a* is the same as in *gul-uš-a*. In the first word *ye* is a 'relative particle', which can become an independent pronoun, for the *-na* suffix is in Speiser's opinion a particle marking plural nouns; this *-na* does not define, he thinks, though Goetze still regards it as a plural article. It refers back in this case to an antecedent, 'things'. Then comes the connecting particle *-ma* (pp. 177–9), and *-nin*, which is possibly a particle of asseveration. The second word is a proper name in the 'agentive'. Then comes another personal name which is also in the 'agentive', but the *-š* is lost through assimilation to *-lla* (p. 59). Speiser considers *-lla-* in *Giliallan* a 3rd person plural pronoun of a type he calls 'associative', here 'mediating' between the subject, *yena*, and the predicate. This sentence, then, has the form: 'What-(plural)-and-indeed Mane-by Gilia-[by]-they-and tell-(complement)-(future)-by him'.

This expression of action by passives, called by Speiser 'goal-agent construction' must be contrasted with the prevailing expression by subject and predicate, in which the actor is a noun in the subject case, that is without suffix, or a pronoun, while the predicate is a noun or an impersonal verb-form, intransitive or, if transitive, without an object. This is called by Speiser 'actor-action construction' (p. 259,

art. 247), and the type of sentence 'equational'. Here is an example of such a sentence with a noun as predicate.

un-du-u-un Ma-ni-e-na-an še-e-ni-iw-wu-u-e pa-as-si-it-ḫi
Now-then-*n* Mane-*n*-and brother (*šena*)- my (*iww*)- of (*ue*) envoy.

Scholars have in the past considered some of the occurrences of *-n*, namely those after a noun, as an accusative. Speiser holds that it 'functions as a predicative particle' (p. 172), and translates this sentence freely: 'Now then it is Mane who is my brother's envoy'.

The 'equational' sentence with an intransitive verb as predicate appears in this form:

a-ti-ni-i-in ta-še-e-en id-du-u-uš-ta
And so the gift has gone (p. 172)

ati or *adi* is an independent particle attested only with the suffix *-nin*. The noun *taše* has the predicating suffix *-n*. The verbal root is *idd-* or *itt-*, the *-ušt* is a 'marker' of the perfect, which alternates with *-uš-* in a way not yet satisfactorily explained (pp. 143–4). The final *-a* marks a participial form (pp. 122–3). The sentence has the form, 'thus-indeed (?) gift-(predicate) go–(perfect)-(participle)', or, 'thus gone is the gift'.

But this *-n*, according to Speiser, can be attached to verbs in 'goal-agent construction':

un-du-ma-a-an a-ru-u-ša-u-u-un
now-then-and give-(perfect)-by me-*n*

The interjection *undu* is followed by *-ma* plus *-an*, two 'connective particles', a combined form 'naturally . . . used' 'where a contrastive value was required' (p. 180). The verb *ar*, 'give', is followed by the 'marker' of the perfect, *-uš-*, and the pronominal suffix of the first person singular denoting the agent, *-au*. The end is the predicating element *-n*, if Speiser is right. He translates freely: 'Now then she (the wife) has been given by me'. Yet it is not immediately obvious why *ar-uš-au* in this sentence is 'predicative' if *gul-uš-a* in the first sentence analyzed is not, and I cannot pretend to understand Speiser's statement on this point (pp. 210–1). But if it is true that the same element *-n* can be affixed to both verbs and nouns, that only confirms an important feature of this language, completely strange to any student of Indo-European or Semitic languages.

The feature I mean is explained by Speiser on p. 71. 'There exist simple means of turning a noun into a verb and a verb into a noun', e.g. *ar-uš-au-še-ne-we*; 'here the finite verbal form' *ar-uš-au* '"given-past-by me" has been turned into a nominal attribute by means of the nominalizing element *-še-*, and is provided consequently, with the nominal suffixes *-ne-we*'. The noun to which this complex relates means 'dowry', and the whole has to be translated 'which I have given', referring to a noun in the genitive, *-we*. In other words, what is, in most languages that we know, a dependent clause, becomes in Hurrian a noun-complex, based on a verbal form. Goetze has analyzed a similar form, taken from a Boğazköy text, in *Bulletin of the American Schools of Oriental Research* (no. 85, pp. 32–3): *ašḫuši-kunniwina*. The stem *ašḫ-*, when used as an adjective or adverb, means 'above', and as a verb, 'to mention previously', according to Goetze. The afformative of the perfect tense, *-uš-*, is followed by the connective vowel *-i-*, which marks a particular class of verbs, either passive forms, according to Goetze, or intransitives, according to Speiser. The augment *-kku-* is thought to be an iterative and the *-nn-* is taken by Goetze to be a pronoun of the third person singular, while Speiser (p. 115), explains *-nne* as an extension of the *-ne* which marks 'attributive relation', which occurs in *ar-uš-au-še-ne-we*. The *-wi* is a genitive ending which marks the complex as attributive, that is belonging to a noun in the genitive, and the *-na* is the plural suffix mentioned previously. Taken with its antecedent 'father', the complex means, according to Goetze '(the gods of the father) mention was continually being made of him above', which we should again translate by a subordinate clause.

Enough has been said to show a few of the peculiarities of this language. They are not easy to unravel and to explain. Professor Speiser's work has, owing to its form, two aspects, the elucidation of forms and constructions on the one hand, and an ordered exposition of his results, accidence and syntax, on the other. It would be idle to pretend that he has achieved clarity, for where he has had to pursue the first object, the second suffers. I could have wished that he had confined himself to elucidation, and for that purpose had arranged the material in his fourth and fifth chapters otherwise. But an author has a right to choose his own form and we must gratefully accept the immense labour of research in the form given. Naturally, in dealing with a grammar so utterly strange to us in its nature, Speiser has to adopt a new terminology, or to adapt old terms to slightly different

senses. The strange is often unpleasant; doubtless we shall become accustomed to this new jargon, some of which has been quoted above. There is a love for neologisms that are unnecessary, especially -ive forms; 'contrastive alternation' (p. 214), will serve as an example. I hope that some of these will be dropped. In some cases their use may be due to a desire to avoid words employed in the grammar of totally different languages; but sometimes these odd combinations are due to haste or impatience in the writing, and constitute a failure to find the right words. There are some sentences, too, which do not, as they stand, convey any meaning, for ordinary words are used in an esoteric way. Thus in p. 211, note 35, 'Even the agentive verb is always in included position unless accompanied by the proper associative element', certain words bear some quite abnormal meaning. The effect is a mixture of code and telegraphic abbreviation, frequently obscure or misleading and always irritating.

As to the value of some of the matter in the chapters on 'Orthographies and Pronunciations' and 'Phonology' I have serious doubts. The Hurrian texts extant are written at very different periods, and the explanation of the meaning of the different types of orthography is necessary and useful. It is also important to know how the consonants are rendered in the alphabetic cuneiform of Ras Shamra. It is to a certain extent true that recent progress has been due to 'the heterogeneous character of the given orthographies' (p. 11). But Professor Speiser has great faith in deductions about the exact nature of sounds based on these different scripts. He is able to show for instance (p. 49), good ground for the statement that in the Ras Shamra syllabary -*ḫ*- is differentiated from -*ḫḫ*-and that the former is represented by an alphabetic sign that can represent *ghayin*, and the latter by the alphabetic sign corresponding to Arabic *ḥa*. Speiser places both under the heading 'Velar Spirants', and assumes, on the basis of analogy from his deductions about the stops, that *ḫḫ* signifies 'lack of voice' while the single *ḫ* is voiced. I cannot see in all this more than assertion of a kind too common in dealing with ancient languages no one has heard spoken. There is no reason why either the -*ḫḫ*- or the -*ḫ*- should be thought exclusively velar, or indeed thought to have been pronounced against the soft palate at all. There are many alternatives. For instance, since -*ḫ* can be dropped in the final position, the probability is, at first thought, that in this case the -*ḫ* was a guttural, the omission of which in pronunciation is reflected in the writing. The alternation of *k*, *g* and *ḫ* at the beginning, and of *k* and *ḫ* at the end of the word for

'*throne*' is said by Speiser to show that this word is a loan word. Nevertheless the alternation points to an interpretation of the 'phonology' quite different from Speiser's. The sounds represented might even be clicks of some kind. The excess of optimism in this matter is due to Speiser's use of the documents written in the Ras Shamra alphabet. That material can only safely be used when it has been fully explained; in this book only isolated words are interpreted, and such interpretation is useful, but not final. The principle applied by Speiser seems to be, one alphabetic sign, one phonetic value. It is a curious fact that, though living speech teaches us how infinite are the varieties in pronunciation, and how completely any alphabet fails in rendering speech, modern linguistic scholarship when dealing with very ancient languages perpetually follows this will-of-the-wisp 'principle'. It is not a principle, but a dogma. The rendering of the sound transcribed -*ḫḫ*- in syllabic cuneiform by the alphabetic equivalent proves nothing more than that the sound was some kind of aspirate. In Syriac, Greek *kappa* and Latin *c* are rendered by the guttural *qoph*, not *kaph*. What does that prove?

I must confess also that I am not prepared to accept a statement like 'Consistent double writing of liquids and nasals indicates length' *ex cathedra*. There is no obvious reason why the double writing should not indicate, as it seems to do, reduplication. It is no use arguing on the lines, 'this is true of the letter *b*, therefore it is true of the letter *c*'. The science of phonetics teaches that each class requires individual treatment, and that is what Speiser has not accorded to the liquids and nasals.

Nothing said here must be supposed to show any disregard of the importance of the science of phonetics for the study of language. The point is that it is an exact science, based on the classification of evidence and exact description of sounds; where the evidence is lacking, the science cannot exist. We have a tradition as to the pronunciation of Greek and Latin, and we can infer, with some doubt, how these languages were pronounced in their early stages. We have a late tradition as to how Hebrew was read in the synagogues; but our complete ignorance as to the pronunciation of Hebrew in the 7th century B.C. is merely concealed by the Masoretic pointing. It is possible to compare Akkadian sounds to those of the family of languages to which it belongs, the Semitic; but how can we employ the precise terms of scientific phonetics? And when we are dealing with an absolutely unknown language, we are not in a position to use scientific terminology

at all, even if it could be shown that all our evidence related to one dialect as spoken at one time. But in the case of Hurrian the evidence derives from documents written over four and a half centuries. There is moreover the certainty that there were many dialects of Hurrian, and that the people who spoke this language lived among, and intermarried with, peoples of other speech. The differences of pronunciation resulting from differences of time, place and person are reflected in these texts. Perhaps this fact is not sufficiently stressed and repeated in this book, though it is invoked occasionally, as on p. 175, to explain divergent grammatical usages. Only part of the 2nd and 3rd chapters seems to me necessary, or indeed correct. Some of the remainder is interesting, and perhaps of help, in providing a schematic arrangement of facts. But much is merely an excursion into the province of the unknowable.

Last of all we come to the Introduction, which must of course be read first. It is, in the main, a statement as to the available material, well and concisely done. I think a caveat ought to be entered against inferences that may be drawn from article 5 on pp. 3–4. It is not to be doubted that the Hittites called this language ' the language of the *Ḫurri* ', nor that the king of Mitanni called the provinces he ruled ' the *Ḫurri*-lands '. But Professor Speiser has more than once seemed to deny that the people called *Šubaru* were the same people, the *Ḫurri*, and though he does not say that specifically on this occasion, he throws unjustified doubts on the meaning of *Šubaru*. His statement that this ethnic is only known from Akkadian is incautious. The form *s'bwir'y* occurs in Egyptian, in the syllabic writing, perhaps to be vocalized *Subaraiy*. Speiser's argument against the identification of the alphabetic *šbr* with *Šubaru* will only be decisive when the alternation of *s* and *š* in Akkadian itself has been fully and satisfactorily explained, a task not yet accomplished and probably beyond accomplishment, despite confident affirmations. What we know is, that the Assyrians called people with Hurrian names, living in *Ḫurri*-lands, *Šubaru*, and it is historically certain that this was the name they applied to a branch of the Hurrian people. The fact that *Subartu* can include Assyria, when astrologers of the 7th century B.C. were dealing with historical omens, is due to early history. The fact that some men from *Subartu* bear names that are not Hurrian is due to the fact that this people did not live in isolation, but with other, generally Semitic, peoples. The glosses marked as ' Su(baraean) ' are sometimes Akkadian for the same reason. ' The use is not consistent ', says Speiser; it is perfectly

consistent with the historical facts, and not consistent with any theory that all the men of a race bear personal names derived from their own language, or that a language like Hurrian was exclusively spoken in any one district. If the Assyrians called this people, or some of them, *Šubaru*, it is a fair inference that they would have called the Hurrian language, or a dialect of it, Subaraean. We cannot prove this. But then we cannot prove that any dialect of Hurrian except that found in the Boğazköy texts was so called; and we certainly cannot yet prove that the Horites spoken of in the Bible or the Egyptian *Kharu* are to be identified with *Ḫurri*, though Professor Speiser considers that they are.

The author has rendered a service to learning. He has collected and co-ordinated the detailed research of others, sifted it and presented a reasoned account, with notable contributions of his own. There is still work to be done, corrections will be made and further steps taken. Let us hope that, in spite of unfavourable conditions, Professor Speiser will be able to publish, in a reasonable time, the second volume which is promised.

Cremation and Inhumation in the Anglo-Saxon Cemeteries

by J. N. L. Myres

IN his article on 'The Strategy of Anglo-Saxon Invasion' in the March number of Antiquity,[1] Mr K. D. M. Dauncey discusses the cremation cemeteries of Norfolk and Lincolnshire, and endeavours to draw from their distribution and their supposed relationship to the inhumation and the mixed cemeteries of the same and neighbouring areas certain conclusions which, if justified by the available evidence, would be of considerable historical importance. His claim is that the pure (or nearly pure) cremation cemeteries of this region can be regarded as 'primary', not only from the chronological standpoint, compared with the inhumation or mixed cemeteries, but also socially, as indicative of military rather than civilian settlement. Their distribution is thus held to reflect certain strategic conceptions determining the course and the character of the earliest Anglo-Saxon occupation of the eastern Midlands.

In the June number[2] Mr Dayrell Reed has seized Mr Dauncey's material and, after sweeping aside his conclusions, has erected an entirely different historical structure on the same archaeological foundaation. He would have it that Mr Dauncey's cremation cemeteries are the archaeological remains, not of an army of Anglo-Saxon invaders, but rather of Hengist's mercenaries called in by Vortigern to repel the Picts.

We have thus the agreeable spectacle of two entirely different Spanish castles, one possibly Gothic, the other certainly Romanesque, jostling one another for possession of the same foundations. Such a situation may well tempt other inspired architects to take the field with constructions of their own. I am not one of them but, at the risk of depriving posterity of some delightful edifice, perhaps in the Rococo or even the neo-Egyptian manner, I do think it would be as well at this point to have another look at the foundations and see whether

[1] Antiquity, 1942, xvi, 51–63.

[2] ibid. 177–80.

they will really fit any of these airy structures. To do so is the purpose of this paper.

In fact these foundations need a good deal more scrutiny than either of our present castle-builders appears to have given them. Mr Dayrell Reed, on his own admission, has not looked at them independently at all, while Mr Dauncey, who has been at some pains to explore the ground, does not seem to have gone deep enough to realize their full extent, their great complexity or their structural weakness.

In the first place it is unfortunate that he has not used Mr Rainbird Clarke's two articles on ' Norfolk in the Dark Ages ',[3] which contain a complete gazetteer of the evidence available for the Norfolk cemeteries up to 1939. These articles should be studied in detail in the present connexion ; they entirely supersede Baldwin Brown's account on which Mr Dauncey appears to rely, and the information they contain not only makes it possible to amplify or to qualify his remarks on some of the eight Norfolk cremation cemeteries on his list, but to add to it at least another six relevant sites.[4]

They also necessitate some modification of Mr Dauncey's insistence on the ' purity ' of Norfolk as a cremation area. More or less pure cremation cemeteries are, it is true, thicker on the ground in Norfolk than in any other part of England, but there is no lack of inhumation cemeteries,[5] and some of these, such as Kenninghall, have produced notable collections of sixth-century ornaments, which one might assume from Mr Dauncey's account of the Norfolk evidence to be almost wholly absent. Again, while it is a characteristic of the Norfolk cemeteries to consist predominantly, if not purely, either of cremations or inhumations, yet mixed cemeteries are not unknown ; indeed a number of the so-called pure cremation cemeteries have produced inhumations as well. Mr Dauncey realizes rather uneasily that this is true of Caistor-by-Norwich, the only predominantly cremation cemetery which has been properly excavated in the county, but he does not give the published figures. Up to July 1938 no less than 57 inhumations had been recorded at Caistor against 502 cremations. No other cremation cemetery has been explored and recorded with anything approaching the completeness of Caistor, and one may

[3] *Proceedings of the Norfolk and Norwich Archaeological Society*, XXVII, 163–214, 215–49.

[4] These are the cremation cemeteries of Drayton, Earsham, Catton, North Runcton, Rushford, and Wolterton.

[5] The best known are at Brooke, Hunstanton, Kenninghall, Northwold and Sporle.

reasonably suspect that other sites, whose 'purity' on present evidence is unimpeachable, owe this fact simply to the inadequacy of our information. At least two other cremation cemeteries on Mr Dauncey's list have in fact produced evidence of inhumation,[6] while two of the six sites he does not list—Catton and North Runcton—are in the same position.

The main moral to be drawn from all this is that one should beware of building too weighty a structure of argument on the 'purity' of Norfolk as a cremating area, or on any contrast thereby implied with settlement conditions in districts like the Cambridge region or the Upper Thames valley, where mixed cemeteries with, admittedly, a much higher ratio of inhumations to cremations are the rule. It also serves to soften the contrast drawn by Mr Dauncey between the Norfolk and the Lincolnshire evidence: the most that one is really entitled to say is that both counties have a high proportion of predominantly cremation cemeteries, together with a number of pure or predominantly inhumation cemeteries, the latter showing a wide range of sixth-century ornaments mainly of Anglian or Anglo-Frisian type.

So far as Lincolnshire itself is concerned little need be added to Mr Dauncey's account. The evidence for a cremation cemetery at Lincoln is certainly good enough for provisional acceptance, but there seems no reason for the omission of the South Willingham cemetery on the Wolds, which would appear from Trollope's account to have belonged to the cremation series.[7] There is of course no reason to associate the Stamford window urn, which is much smaller than a normal cremation urn, with the Stamford cremation cemetery, about which unfortunately very little indeed is known.

The distribution of more or less pure cremation cemeteries is not however limited, as Mr Dauncey implies, to the two counties of Norfolk and Lincolnshire, and any attempts, such as he and Mr Dayrell Reed make, to assess their significance must take account of the whole area in which they are found, and not only of an arbitrarily selected part of it. One group which needs to be added is that on the right bank of the Middle Trent and on its eastern tributaries: the cemeteries of Newark and Kingston-on-Soar are the best known of these. Mr Dauncey would appear in fact to be inconsistent with his own hypothesis in

[6] There is a skeleton from Sedgeford in the Museum of the Royal College of Surgeons, and a glass goblet from Markshall is pretty certain proof of an inhumation in that cemetery.

[7] *Arch. Journal*, 1856, XIII, 411.

treating the lands south and east of the middle Trent as a ' secondary ' area of settlement. If we accept his criteria they are as ' primary ' as Norfolk itself.

He is however clearly right in pointing out that the presence of these cremation cemeteries on the right bank only of the Trent makes the use of this river as a highway of penetration by the earliest Mercian settlers extremely improbable. His argument on this point appears to me unanswerable ; and I think we can conclude not only that the earliest Mercians reached their homes overland by the Witham and Ancaster gaps, and further south via the Welland and the Soar, rather than direct by water from the Humber estuary, but also that the Trent itself was the first March or frontier from which Mercia derived its name.[8] If Mr Dauncey wishes to reinforce his argument that these settlers came ultimately from Norfolk I will present him with the fact that the only known parallel to the finest of the three remaining Newark urns, a most unusual and obviously early piece, now at Hull, is an urn from Caistor-by-Norwich which is strikingly similar though cruder in design.[9]

Another ' primary ' area, in Mr Dauncey's sense of the term, which needs to be added to his map, is Deira. Conditions north of the Humber in east Yorkshire are exactly parallel to those of Lincolnshire, and more or less pure cremation cemeteries of precisely similar type are to be found there. The best known are at Sancton, just below the escarpment of the Wolds, and at Heworth a mile or two east of York. York itself has produced more than one group of urns, which give it a much stronger claim than can be made for Lincoln to be regarded as an early centre of cremating Teutons.

These Yorkshire cemeteries, particularly Sancton, from which a long run of urns is preserved,[10] can produce many very close parallels to the urns from Hough-on-the-Hill or the Norfolk cemeteries of Caistor-by-Norwich and North Elmham. Without in any way detracting from Mr Dauncey's claim for Norfolk as a primary invasion base, their presence does strongly suggest that it was not the only one. I have stated elsewhere the reasons which lead me to think that the

[8] I have noted elsewhere the contrast between the date and character of the settlement of Mercia south and north of the Trent, but I did not draw Mr Dauncey's inference about the use of the river. See *Roman Britain and the English Settlements* (1937), 417.

[9] The Newark urn has been illustrated several times : for a drawing see *Antiquaries Journal*, 1937, XVII, 429, Fig. 1 (a). The Caistor urn, no. M48, has not been published.

[10] At Hull and in the Ashmolean Museum, Oxford.

Humber estuary was a primary centre from which the peoples, who still called themselves Humbrenses at the end of the seventh century, radiated to the settlement of all the surrounding lands.[11] Nothing that Mr Dauncey has said seems to me in any way to shake that view, except in so far as he has made it extremely probable that whatever Humbrensian elements there may have been among the earliest Mercians did not reach their new homes by direct access up the Trent.

Later on in this paper I want to suggest the possibility that yet other regions of the eastern Midlands may be described as ' primary ' areas of settlement in Mr Dauncey's sense that they may have once possessed substantial cremation cemeteries. It will be best however to turn away from this matter of distribution for a moment to enquire whether Mr Dauncey is justified in his view that these cremation cemeteries are ' primary ', that is both chronologically earlier and also, as military sites, socially prior to the main mass of the Anglo-Saxon settlements.

He has attempted to disarm criticism of this theory in advance by admitting that no chronological distinction can be drawn on typological grounds between the earliest contents of the cremation, inhumation and mixed cemeteries. This is true. It would be impossible to establish any necessary priority in date for the pure cremation over the inhumation or mixed cemeteries by an analysis of their contents. It is in fact common ground that fifth-century objects occur in all types of cemeteries, and over an area very much wider even than the cremation area as here extended beyond the limits set by Mr Dauncey.[12] While however this need not be regarded as necessarily fatal to Mr Dauncey's interpretation, since he evidently regards the chronological priority claimed for the cremation cemeteries as so slight as to be undetectable on our present knowledge of the dating of the objects which these cemeteries contain, yet in itself it provides no positive evidence whatever in support of his view, which remains a pure assumption. We have still to answer the question : how far is this assumption justified ?

The broad distinction between cremation as the Teutonic and barbarian burial-rite and inhumation as the Roman and civilized rite in this period is universally recognized. Mr Dauncey's claim for chronological priority for the cremation cemeteries cannot however rest simply on the cultural associations of the two rites, for no one would deny that

[11] *History*, 1935, xx, 250–62.

[12] See *Roman Britain and the English Settlements*, Map x (a).

the Roman and the Teutonic traditions existed side by side in fifth-century Europe. Indeed in a province which had been as thoroughly Romanized as Britain, it might be argued that, so far from the pure cremation cemeteries being necessarily the earlier of the two groups, it is inherently more probable that they are the later, since on any showing the earliest Teutonic arrivals must have encountered a far more vigorous and lively Romano-British cultural tradition than did their followers. The latter, it could be said, only reached this country after the Roman tradition had been weakened by political defeat and social disintegration, and they were thus able to settle *en masse* and so to retain their own habits with a minimum of disturbance. I am not here maintaining that this was in fact the case, but only pointing out that there is really no justification for assuming, without more proof than Mr Dauncey provides, that cremation in itself is either earlier or later than inhumation as an Anglo-Saxon burial-rite in England. It will not escape notice however that these considerations constitute a greater difficulty for Mr Dayrell Reed than for Mr Dauncey. For a body of Romanophile mercenaries, such as he supposes to have produced the cremation cemeteries, is obviously the type of Anglo-Saxon social unit which is most likely to adopt the burial-customs of its Romano-British employers, and the least likely of all to evince an uncompromising adherence to barbaric custom on such a matter.

Mr Dauncey's claim that cremation really is the earlier rite thus appears to rest simply on his view that it is indicative of ' military ' settlement, while inhumation or mixed cemeteries are ' civil '. Here it would be possible to join issue with him on several grounds. In the first place, as I have just suggested, we might reasonably suppose that, if such a distinction between military and civil burial-rites has any validity at all, it would be the inhumation or mixed cemeteries which one would expect to be military and the cremation sites civil. In this connexion moreover it is important to remember two facts about the practice of cremation by the Anglo-Saxons : first, that it takes a great deal of wood to burn a dead body as completely as is normal in these cemeteries, and secondly that bulky but fragile urns of a more or less elaborate construction were habitually used for the reception of the ashes.

Neither of these facts suggests that cremation was at all appropriate for normal employment during the early states of a military invasion such as Mr Dauncey supposes the Anglo-Saxon conquest to have been : if used at all in the stress of such campaigns it is likely

to have been reserved for the formal burial of persons of exalted rank on whose interment in the traditional manner time and labour were felt to be well spent. For ordinary folk it is most unlikely that such luxury was usual. Indeed we may well believe that the most obvious explanation of what Mr Leeds has termed the ' flight from cremation ' by the Anglo-Saxons in this period is the correct one : it was directly induced by the impracticability of maintaining so cumbersome a method of burial in the precarious conditions which the earliest invaders had to meet.

On Mr Dauncey's hypothesis the provision of the cremation urns presents a practical difficulty which he has not faced. Among the Anglo-Saxons, as among most primitive peoples, it is virtually certain that pot-making was a woman's craft. Either therefore the alleged ' military ' settlements were made ' *en famille* ', in which case it is difficult to distinguish them from civil villages, or we have to suppose that a suitable stock of urns was shipped over from Germany with the rest of the invaders' baggage, or was perhaps thoughtfully despatched after the expeditionary force by some enterprising women's organization like ' Bundles for Britain '. Quite apart from its inherent absurdity however this idea is ruled out at once by a study of the pottery. It is true that here and there an urn has turned up in this country so strongly continental in character as to make direct shipment from Germany possible,[13] but the vast bulk of the English cremation pottery can be described rather as closely reminiscent of its continental prototypes, than as indistinguishable from them. The development of insular styles and fashions after the settlement in Britain makes confusion of the two groups of urns as a whole quite impossible for anyone who has handled any number of both. It can therefore be suggested that Mr Dauncey's attribution of the ' pure ' cremation cemeteries to military rather than civilian settlers lacks realism : he does not appear to have appreciated the social implications of cremation as a burial-rite.

One might indeed question the whole distinction which he draws between military and civilian settlement in this period. It may certainly be doubted whether Teutonic society in the fifth century would have recognized the difference between them. Conquest and settlement were not two successive events, the work of two different elements in the population : they were a single process carried out by the people

[13] Mr Dauncey will be glad to know that Norfolk has more than its fair share of these continental urns ; examples could be quoted from Caistor-by-Norwich, Brundall and Pensthorpe.

as a whole, a people which could turn without difficulty from the winning of battles to the growing of crops and back again as occasion demanded, and saw nothing incongruous in alternating a life of honest toil with the pleasures of plunder and piracy. It is true that, as in many periods, the upper classes may have specialized to some extent in plunder and piracy and may have left the honest toil, whenever possible, to their humbler dependents; but, whatever may have become true of Anglo-Saxon society in later centuries, there is no reason to believe that in the age of conquest one group of the conquerors was very much more military or very much more civil than another. It certainly needs more demonstration than Mr Dauncey provides to convince one that such a distinction, if it existed, was reflected in a sharp contrast of burial custom.

It has already been suggested that the sharpness of this contrast between cremation and inhumation in the early Saxon period can be overstated. But even if we grant the chronological priority and cultural aloofness which he assumes for the users of the 'pure' cremation cemeteries, we may well ask whether he is justified in distinguishing this group of cemeteries centred on Norfolk and Lincolnshire (though not, as we have seen, by any means confined to these counties) so sharply from the area of mixed cemeteries in the Cambridge region or the Upper Thames valley. Why should not the substantial cremation elements in such cemeteries as Little Wilbraham, Girton, St. John's (Cambridge) or Abingdon (Berks.) indicate original communities of the same type as the 'pure' cremation cemeteries of Norfolk or Lincolnshire, but ones that, owing to some later historical development, have been overlaid by settlements of inhumers? If this possibility is once granted, Mr Dauncey's distribution-map loses what little significance still clings to it, for cemeteries containing a substantial cremation element, and thus potentially 'primary' in his sense, occur over a very much wider area than that served by the group of Roman roads on which he lays such stress. I would emphasize that in putting forward this point I am not sponsoring this suggested explanation of the relation of cremation and inhumation in the mixed cemeteries. I do not believe it to be at all generally true, though in one or two instances it looks like being so. I am here merely concerned to take the facts as Mr Dauncey sees them, and to suggest that, even if he sees them right, they may not be consistent with the conclusions which he draws from them.

Nonetheless he has directed attention to an important point in emphasizing the relationship of Anglo-Saxon cremation cemeteries

to the Romano-British topographical background in this part of England. It is not however their association with the Roman roads which I would stress so much as their association with the Roman walled towns which those roads connect. It is indeed a striking fact that Caistor-by-Norwich, Ancaster and Lincoln in Mr Dauncey's area, and, one may add, York, Malton and Cambridge outside it, are all marked on the Anglo-Saxon map by the presence of one or more cemeteries in which cremation, if not the sole rite, is at any rate substantially employed. So far as is known at present this association distinguishes the Roman towns of this area—the traditionally Anglian area—from those of the Saxon areas or of the southeast. Nothing of the kind has so far been discovered for example at London, Verulamium, Colchester, Chichester, Silchester, Winchester or, of course, among the Roman towns of the western midlands where cremation is rare and pagan cemeteries of any sort comparatively uncommon. It must surely have some significance that in the whole area lying east of a line joining York to Bedford there is scarcely a Roman walled site, apart from the Saxon Shore forts and their analogues on the Lincolnshire Wolds, without its accompanying Anglo-Saxon cemetery, while outside this region such association is virtually unknown.

I am not convinced that either Mr Dauncey's or Mr Dayrell Reed's hypothesis provides a satisfactory explanation of this phenomenon. It should however be noted that of the two Mr Dayrell Reed's has a certain attractiveness, if only because an Anglo-Saxon distribution, which conforms so markedly to the Romano-British pattern, might naturally be supposed to imply a closer and more friendly relationship between the two peoples than we should expect if Mr Dauncey's picture of the military invasion is correct. It can at any rate be said that, if Hengist and his mercenaries were ever set the task of protecting this part of Roman Britain from the Picts, the places to which we should naturally look for traces of these federate garrisons would certainly be the Roman walled sites, for these by the middle of the fifth century were the only places where there was anything effectively Romano-British, either in culture or organization, left to defend. The chief difficulty which I feel in accepting this view outright is one which has been mentioned already in another connexion, namely that federate or mercenary Saxons employed by Romano-British tyrants are about the last element in the barbarian complex that one would expect to maintain such an obstinate adherence as these cemeteries display to the barbarian and uncivilized rite of cremation. Indeed it is this difficulty

of reconciling the apparent cultural behaviour of these cremating people in the eastern Midlands, with the entirely different and far more civilized behaviour of the one group of the invaders who certainly did settle in the first instance as *foederati* in this country, namely Hengist's own people in Kent, that makes it difficult to accept wholeheartedly Mr Dayrell Reed's attractive picture at all.[14] Those who believe in desperate remedies will no doubt explain everything by saying that Hengist and his people never did settle in Kent, and that in this matter we have all been misled for twelve hundred years by the Venerable Bede. On a point of this kind however a historian may well be pardoned if he is reluctant to believe that Bede was wholly misinformed, particularly as his Kentish sources were exceptionally good and his story is borne out by the native traditions of the Kentish royal family which claimed a direct descent from Hengist himself.

Mr Dayrell Reed himself seems conscious of the difficulty involved in associating the civilized Cantware with these barbaric folk in the eastern Midlands. That is presumably why he attaches ' enormous importance ' to two sherds, believed to be Frankish, and found by Mr Corder unstratified in the Roman town at Brough-on-Humber in 1935.[15] Now it was I who suggested to Mr Corder that these sherds might be Frankish, and unfortunately there can be very little doubt that I was wrong. I must therefore apologize to Mr Dayrell Reed for having led him astray in this matter. The fact is that, at the time these sherds were found, the stamped pottery of ' Parisian ' type, which has since turned up in undeniably early Romano-British contexts both at Brough itself and elsewhere in east Yorkshire,[16] had not been recognized as such, and one of the two sherds in question is without doubt Parisian. So also, I now think, is the other, although it has certain features not so far certainly paralleled among this Parisian material. But even if this sherd were Frankish it could not of course be dated

[14] I have not forgotten that there are cremation cemeteries of a sort in Kent, but they are in no way comparable to the ' pure ' cemeteries in Mr Dauncey's sense of the term, nor in my opinion can any case be made for believing that they represent a period of Kentish settlement before the earliest of the inhumations there.

[15] *Excavations at the Roman Town at Brough*, 1935, fig. 8, nos. 12, 13, and p. 38.

[16] *Brough*, 1936, fig. 16, nos. 1–4; *Brough*, 1937, fig. 8, nos. 11, 12; *Elmswell*, 1937 (Hull Museum Publications, no. 198), fig. 5, nos. 6, 7; *Elmswell*, 1938, fig. 13, no. 24; *Rudston, Yorks. Arch. Journal*, 1937, XXXIII, fig. 14, no. 2. I owe some of the references to the kindness of Mr Corder who writes, with reference to the alleged Frankish sherds, ' I certainly shall not demur if you do feel inclined to recant '.

with any confidence at all to the fifth century, and could only with the grossest distortion be made to serve any useful purpose in Mr Dayrell Reed's castle. I do not for a moment deny the interest of the hints in the literary sources that Hengist's people had at some stage a connexion with Deira. As I have suggested elsewhere[17], there are points both about the earliest brooches and about the earliest Anglo-Saxon pottery of Deira which make a Frisian connexion for the first settlers possible, and, since the historic Hengist has similar associations, it is surely these clues rather than the dubious sherds at Brough which Mr Dayrell Reed should pursue if he wants to find Hengist's relatives in the ' sinistral ' part of Britain.

But in the last resort both Mr Dauncey's and Mr Dayrell Reed's hypotheses are founded on a theory about the relation of cremation and inhumation as Anglo-Saxon burial-rites which is, I think, demonstrably false. The difficulty is not merely that, as we have seen, there are no grounds for believing in even the briefest chronological priority for cremation over inhumation; nor even that their theories ignore such positive evidence for the contemporaneity of the two rites as the existence in the same cemetery of cremation burials disturbed by subsequent inhumations, and of inhumations overlaid by subsequent cremations. It lies rather in the basic assumption that cremation enjoyed only a brief vogue at the beginning of the period and quickly gave way to inhumation. There is no reason whatever to believe that this was so. It is rendered most improbable by numerous recorded instances of one cremation burial disturbing another in such a way as to suggest that the first had been long forgotten when the second took place. It is directly contradicted by the discovery of sixth-century cruciform brooches in several cremation urns.[18] But anyone who studies the cremation pottery as a whole, paying full attention to these few but precious links with the established chronology of the cruciform brooches, is bound to reach the conclusion that the development of the commoner styles of its ornamentation must cover a period far longer than Mr Dauncey's hypothesis will allow. I have already sketched elsewhere the outline of certain of these developments as they appear to

[17] ' The Teutonic Settlement of Northern England '. *History*, 1935, XX, 250–62, especially 260–1.

[18] See e.g. the instances from Holywell Row, Suffolk and Caistor-by-Norwich quoted in *Antiq. Journal*, 1937, XVII, 432; or those from Girton in Hollingworth and O'Reilly *Anglo-Saxon Cemetery at Girton College*, 1925, p. 22–7.

me,[19] and there is a great deal more to be done before the subject is properly developed. I can however record my conviction that, if we take the whole mass of Anglo-Saxon cremation pottery, we are not dealing with the products of a brief military phase at the beginning of the settlement period, but with an evolutionary series representing the steady output of established communities and registering in many cemeteries the changing fashions and tastes of four or five generations of women.

It is surely a grave weakness both of Mr Dauncey's and of Mr Dayrell Reed's argument that in discussing the significance of the cremation cemeteries they have nothing whatever to say about the dating of the cremation pottery. Their attitude to the whole question at issue strikes me as antediluvian. We laugh at eighteenth-century antiquaries who saw in every Roman villa a palace of Julius Caesar or a camp of the legionaries of Aulus Plautius or Agricola : we know better nowadays, chiefly because we have learned to date Roman pottery. But we have not yet learnt to date Anglo–Saxon pottery, and so it is still possible to claim that cemeteries which may well have been in use for a hundred and fifty years will provide us with the clue to the Strategy of Anglo-Saxon Invasion, or the tactics of Hengist in coping with the Picts. It would really be wise to forget all about the fascinating stories told by Mr Dauncey and Mr Dayrell Reed till we have mastered the story to be told by the cremation urns. And we cannot hope to do this until they have been properly published. I would like to suggest that the publication of a *Corpus Vasorum Anglo-Saxonicorum* should be recognized as an urgent major obligation when the time comes to plan the course of British archaeology after the war.

[19] 'Three styles of decoration on Anglo-Saxon pottery', *Antiq. Journal*, 1937, XVII, 424–37; 'The Anglo-Saxon Pottery of Norfolk', *Proc. Norfolk and Norwich Arch. Society*, XXVII, 185–212.

The Revival of Berber Art

by W. H. C. Frend

MUCH has been written about the revival of Celtic art in Britain during the last century of the Roman occupation, but so far evidence for similar movements in other parts of the Roman Empire has received but little attention from British archaeologists. Yet it is now nearly half a century since M. P. Gavault, a French architect, excavated a 4th–5th century Christian church at Tigzirt on the Mediterranean coast west of Port Gueydon, and drew attention to the unclassical character of the ornamentation of the supports to the clerestory arches in the church. His suggestion was that the ornamentation was inspired by pre-Roman, Carthaginian originals, and implied a popular movement away from classical design.[1]

That was in 1895. In 1898 Gsell published the result of his work on the Bled-Guitoun, a 4th-century Christian royal tomb situated near Ménerville, 35 miles southeast of Algiers, and some 50 miles southwest of Tigzirt. Gsell pointed out that the elaborate geometric designs which had been chipped out on the flat surface of a false doorway to the tomb owed nothing to Rome, but in fact represented a renaissance of native art inspired to a large extent by the triumph of Christianity.[2] As emphasizing the native element in this revival, Gsell showed that the tomb was constructed on much the same plan as the Kbor Roumi, the mausoleum of king Juba II, built about 100 miles westward along the coast four centuries previously.[3] The tumulus was probably the prototype of both.

Gsell's later researches[4] suggested that the Bled-Guitoun might with some probability be attributed to Firmus, the ruler of a confederation of tribes in that part of the Kabylie about A.D. 370, and leader of

[1] P. Gavault, *Etude sur les Ruines romaines de Tigzirt*. Paris, 1897, p. 22. 'Au déclin de l'Empire l'art chrétien, essentiellement populaire, revint aux thèmes anciens, en croyant peut-être faire du nouveau. Nous dirions qu'il eût alors une sorte de renaissance punique, si le terme n'était pas trop fort'.

[2] S. Gsell, 'Comptes-Rendues de l'Académie des Inscriptions et Belles Lettres', (=*CRAI*) 1898, p. 481–99. 'On surprend là les symptomes d'une renaissance determinée sans doute en grande partie par le triomphe de chrétienté', p. 496.

[3] S. Gsell, op. cit. p. 495.

[4] S. Gsell, *Recueil de Constantine*, 1902, XXXVI, p. 27 ff.

the Berber rising of 371–75 against the fiscal oppression of the Imperial officials. The allusion to the influence of Christianity in stimulating the revival of native art deserves notice in this connexion, for Firmus, if not a Donatist Christian himself, was supported by the Donatist Church in his revolt, as was his brother Gildo in a similar uprising twenty-five years later.[5] In both cases, the Imperialists were supported by the African Catholics.

Possibly, influenced by the statements of Augustine that the native population in North Africa spoke Punic at this period,[6] both Gsell and Gavault were inclined to associate any revival of native art to underlying Punic rather than Libyan or Berber influences. But up to now, evidences for the spread of Punic language and art in Algeria during the Roman period, such as neo-Punic inscriptions, have been confined to the urban areas of the river valleys of the Tell, or the sites of former Carthaginian coastal settlements, as Tipasa. None have been discovered in the Kabylie where Gsell and Gavault's discoveries were made, and none in the Aures mountains or the high plains of central Algeria (southern Numidia) where most of the examples of 4th–5th century native art have been found. An alternative solution might be that the artistic revival was a revival of Berber art, in part inspired from prehistoric Berber motifs ; and that this revival can be closely associated with first, the growing prosperity of the African countryside during the 3rd and 4th centuries, and secondly, with the rise of the Donatist Church as representative of the Berbers' reaction and revolt against the Latin civilization, which their masters had endeavoured to impose upon them.

The history of North African art in the Roman period is in some ways similar to the history of art in Roman Britain. In general neither the Berber nor the Celt were able to adapt classical themes to their own needs and so develop a provincial art.[7] In the first three centuries A.D. the native artist remained for the most part a bad copyist of a classical

[5] Augustine, *Ep.* 87, 10. *CSEL*, XXXIV, 2, p. 406. *Contra Litteras Petiliani*, II, 83, 184, pl. XLIII, col. 316. cf. Ammianus Marcellinus (ed. Loeb), XXIX, 5, 15.

[6] Augustine, *Ep.* 84, 2. *CSEL*, XXXIV, 2, p. 293, on region of Setif ' sed cum Punica lingua, cuius inopia in nostris regionibus evangelica dispensatio multorum laborat, illic autem euisdem linguae usus omnium est '. cf. *Ep.* 209, 3. See note by author on this subject in *J.T.S.*, July-October, 1942, p. 188.

[7] A notable exception is the frieze, dated approximately to the end of the 2nd century A.D., found during the excavation of the theatre at Hippo (Bone). The frieze is cut in very flat relief, and the geometric designs, which form the greater part of the ornamentation, include many which were popular with the Berbers two centuries later.

masterpiece. In the larger Roman cities his attempts to imitate Roman sculpture were passable, but further away from the main centres of Romanization his copy became increasingly barbarous. Funerary monuments, found in more remote Romano-Berber towns, show little attempt to proportion the head of the figure to its body, or to make its feet face front, or its arms repose naturally. The relief of the carving becomes flatter, until the Roman citizen, whose memory the sculptor was being paid to perpetuate, shades into the Libyan god of the previous age. It is often differentiated from the latter only by a few parallel strokes on the body to represent a toga.[8]

At the time of the Roman occupation, however, Libyan art could claim no high level of achievement. Libyan carvings in flat relief in stone can hardly be said to portray living figures. Chiefs, such as Retaten, whom the native artists may have tried to represent, remain stiff and hieratic, symbols of deity rather than once living beings.[9] The Libyan attempts at decorative design were little more advanced. Simple linear ornament, such as lozenges, chevrons, rosettes, spirals and chequers were sometimes stamped on their pottery or carved on burial steles from a remote period, but there is no parallel to the genius of Celtic art at the same period. Pre-Roman Libyan art can be assessed from fairly typical examples such as an uninscribed stele from Calama, for which a date in the 1st century A.D. may be suggested. This shows a figure holding a sacrificial cake aloft in his left hand. The figure itself is represented by a series of straight lines with a pointed oval for his head. A five-pointed rosette inscribed in a circle (symbol of the sun?) and resting on his head, has been marked out with a compass. The relief is never more than $\frac{1}{2}$ inch.

Imitation of Roman methods did not wholly supersede Berber ideas during the first three centuries A.D. The art of the conquerors, however, caught hold, and by the middle of the third century the inhabitants of the high plains of Numidia were representing Saturn (Baal-Hammon) in Roman dress, whereas previously the god had only been shown in symbol or by a geometric figure.

But in the 4th century a complete change seems to have taken place. Imitations of classical art fall into disrepute in the North African

[8] Dr L. Carton describes some of these more grotesque Romano-Berber sculptures which he found at Thuburnica near the present Algerian-Tunisian border. *Bulletin archéologique du Comité des Travaux historiques* (=*BAC*), 1908, p. 436.

[9] A. Vel, *Recueil de Constantine*, 1905, XXXIX, 204. The statue now stands in the courtyard of Constantine Museum.

PLATE I

(B) SQUARE PILLAR FROM CHURCH AT OUED R'ZEL
(CENTRAL ALGERIA)

(A) CARVED STONE FROM HENCHIR TENTILIA, THEVESTE

Phs. W. H. C. Frend

facing p. 344

PLATE III

FRIEZE OF CAPITOL AT TIMGAD
Ph. W. H. C. Frend

PLATE III

CLAY LAMP FROM 4TH-5TH CENTURY CHAPEL, HENCHIR SEFFANE
Ph. A. Berthier

PLATE IV

KABYLE DECORATED STORAGE JARS FROM SIDI AISSA

Ph. Ofalac

countryside. Art becomes once more the business of the village woodcarver, and mason. One might quote as an example of the reaction against classical themes a carved upright of the chancel arch from a chapel at Henchir Tentilia, some 40 miles south of Theveste (Tebessa). A funerary monument of a husband and wife in Roman costume has been disfigured, the face smashed in, and the surface bearing the inscription planed down, while on the remaining three sides finely executed geometric patterns have been carved in successive panels. The technique and the designs, which include wheels, interlacing discs, and triangles, are strikingly similar to the woodwork carvings made by the Kabyles today. Another re-used stone bearing similar carvings found in the chapel at Henchir Tentilia is shown (PLATE I, A).

Further illustrations of the skill of the Berber craftsmen in the late Roman period may be found in carvings in stone or plaster which have been discovered throughout what might be termed the ' Berber fringe ' of Roman North Africa, from Asabaa in Tripolitania to Tigzirt in Kabylie. By far the largest proportion, however, of these sculptures has been found in buildings (mostly churches) in villages in southern Numidia, the territory between Constantine and the Aures mountains. These include carved oblong slabs shaped like the false doorway of the Bled-Guitoun, from chapels at Vazaivi (Ain-Zoui),[10] on the Djebel Djaafa near Mascula (Khenchela)[11], and Henchir bou Said,[12] square, sculptured pillars from Henchir Beguer,[13] Vegesela[14] (Ksar el Kelb) and La Maison des Parrasols near Mascula,[15] and stone and plaster carvings from churches, such as Ain Fakroun,[16] Bou Takrematem,[17] Morsott,[18] Sef ed Dalaa,[19] and Henchir el Ateuch.[20] Timgad, the

[10] This is now in the museum at Tebessa (illustrated under ' Pilastre ' by H. Leclercq in the *Dictionnaire d'archéologie chrétienne*, 1939, column 1031).

[11] Now in the church of the Sacré Coeur, Constantine, *CIL*, VIII, 17715.

[12] P. Monceaux, *Bulletin de la Société nationale des Antiquaires de France*, 1909, p. 210. Also at Kheret el Ousfane, see S. Gsell and H. Graillot, *Mélanges de l'Ecole de Rome*, 1894, XIV, 575.

[13] S. Gsell, *Musée de Tebessa*, 1902, p. 52, figure 4.

[14] P. Cayrel, *Mélanges de l'Ecole de Rome*, 1934, LI, 133.

[15] S. Gsell and H. Graillot, *Mélanges de l'Ecole de Rome*, 1893, XIII, 499 and plate VII.

[16] *CIL*, VIII, 18742.

[17] Illustrated in A. Berthier's and M. Martin's ' Les Fouilles à Bou-Takrematem ', *Revue Africaine*, 1936.

[18] Carved cornices now in Algiers Museum, See S. Gsell, *BAC*, 1901, p. 158–61.

[19] P. Monceaux, *BAC*, 1895, p. 76–77.

[20] M. Simon, *Mélanges de l'Ecole de Rome*, 1934, LI, 167.

largest town of southern Numidia, has also produced the finest examples of 4th-century Berber art—a marble frieze carved in shallow relief which served as a façade for the base of the raised cella of the Capitol (PLATE II), and the mosaic which lined the font in the baptistery of Bishop Optatus' cathedral. The colours in which the chevron design employed by the artist have been picked out—a medley of orange, green, and blue mosaic—show a particularly high standard of taste and workmanship.[21] That these patterns were inspired by the current ideas of the Berber peasants is suggested by the fact that the chevron and rosette motif were used equally for coarse pottery ornamentation, or the decoration of interior walls of buildings in Numidian villages. Rough clay lamps and burners have been found in the churches of Henchir Seffane and Ferme Gourdon (on the plain of Bou Lhilet, north of Timgad) on which the chevron has been chipped out so as to imitate basket-work[22] (PLATE III).

A second development in Berber art of the 4th century was a reversion to sculpture in very flat relief. In this, though the technique would appear to have been the same as that employed by the Libyans, the craftsmanship of the 4th-century Berber was far superior to that of his ancestors. Examples of this type of sculpture, representing Biblical scenes, such as Balaam beating his ass, or Noah's ark, have been found at Tigzirt[23] and at Oued R'zel[24] in southern Numidia. A stone table on which fish had been carved in similar style, also from Oued R'zel, was probably used for some form of funeral feast[25] (PLATE I, B).

The designs and methods of ornamentation outlined above have remained almost the only themes of Berber art to the present day. After the Arab invasions from the 7th to the 11th century, certain purely liturgic themes connected with Christianity, such as the dove or the peacock, or the Eucharistic vase, died out, but the tradition of geometric patterns remained. It has been pointed out that the lozenges, rosettes, arcades, and draught-board patterns which characterize the stone and wood carvings of early North African Moslem art, such as those from

[21] cf. A. Ballu, *Les Ruines de Timgad*, Paris, 1911, pp. 40–4 (photograph published).

[22] These and many other examples of rustic Romano-Berber ceramic art are now in Constantine Museum, where they await publication by their discoverers M.M. Martin and Berthier.

[23] P. Gavault, op. cit. 17 ff.

[24] A. Berthier, ' Fouilles dans une chapelle chrétienne à l'Oued R'zel ', *Revue Africaine*, 1936.

[25] A. Berthier, ibid.

the 10th century Kharedjite buildings of Sedrata and Ouarghla, bear no relation to the designs which later became popular in the Mohammedan West.[26] They do, on the other hand, find exact parallels in the Berber art of the Christian period. An illustration of how these same patterns have survived among the Berbers today may be given by a comparison between the decoration of the pottery from Numidian village sites as illustrated (PLATE III) and that on some modern storage jars in a house in the Kabyle village of Sidi Aissa (PLATE IV). The lines of the chevron pattern on the jars have become wavy and indistinct, but they are recognizable as a degenerate copy of the art of Bishop Optatus' mosaic, and of the lamps and incense burners of the southern Numidian chapels.

In contrast to the revival of native art in the countryside during the later Roman period, art in the towns and villas of the more Romanized parts of North Africa continued to show strong classical influence.[27] The same conventions and the same mythological scenes which were popular in the second and third centuries retained their favour in the sixth. Designs became more stylized, the horror of empty space more pronounced, and representations of living forms often degenerated into magical symbols, but classical art, like its counterpart, Latin rhetoric, found in the African cities an hospitable last refuge.

The technical skill of the Berber craftsman in the late Roman period, and the rich variety of the designs which he used, might suggest the existence of comparatively prosperous communities in the North African countryside in that period. There are indications that this in fact was the case. In Herodian's time the African peasant population was reputedly numerous.[28] Evidence for the increase both of the area and wealth of the African villages from the 3rd century onwards is

[26] G. Marçais, *L'Art Musulman de L'Algérie*, Alger, 1909, p. 4–9, plates I and II. An extremely fine example of Kabylie wood carving dated to the 14th century, in which the craftsman has contrived to find room for nearly all the patterns typical of Berber art in the later Empire, is described by Prof. Marçais under 'Note sur une Coffre Kabyle, in *Revue Africaine*, 1927, p. 92–8.

[27] This subject has been dealt exhaustively by M.M. Poinssot and Lantier. See articles on 'L'église d'el Mouasset' in *BAC*, 1925, p. 172 ff., and 'La Chapelle de l'Evêque Honorius, in *BAC*, 1932–33, pp. 787–93. Also 'Les Mosaiques de la Maison d'Ariadne à Carthage', in *Monuments Piot*, XXVII, p. 28, and 'Les Mosaiques d'El Haouria' in the *Actes du Premier Congrès de la Fédération des Sociétés savantes de l'Afrique du Nord*, 1935, p. 183–206.

[28] Herodian (ed. Stavenhagen) VII, 4, 4, 'φύσει γὰρ πολυάνθρωπος οὐσα ἡ Λιβύη πολλοὺς ἔιχε τούς τὴν γῆν γεωργοῦντας.

to be found both in Numidia, and in the neighbouring province of Mauretania Sitifensis. Almost the whole area of Mauretania Sitifensis was included in great Imperial and private estates, peopled by groups of small tenant-farmers. A series of inscriptions covering the period 190–250[29] from the settlements of these Imperial coloni, shows that the bounds of their villages were being continually enlarged, and their buildings renovated and improved. At the same time, to the south and southwest, in country now parched and almost uninhabited, new areas of settlement were being opened up. These areas, particularly round Doucen, have provided evidence for their continuing prosperity in the next century.[30]

In Numidia there are no such precise indications, but the peasant population must have been very large. On the high plains each side of the chotts which lie to the north of the Aures mountains, are the remains of over 1200 farms and villages—almost one settlement every $2\frac{1}{2}$ miles. Round each well, even though the water there is brackish, there are signs of occupation in Roman times. Though the average size of the villages is not more than 15 to 20 acres, there existed also some great areas of settlement, such as Kherbet Bahrarous or Kherbet bou Addoufen the ruins of which extend nearly 100 acres. Much of the building must have taken place in the 3rd and later centuries. Churches and storehouses, two characteristic ruins in a Romano-Berber village, often stood on new ground. At Kherbet Bahrarous the writer found coins of Gallienus resting on the virgin soil, into which the foundations of a building which comprised both church and store-house had been dug.[31] The level of prosperity in some of these villages, especially in the territory south of Tebessa, seems also to have been fairly high.[32]

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[29] The best commentary on these inscriptions is J. Carcopino, 'Les Castella de la Plaine de Setif, in *Revue Africaine*, 1918, pp. 1–22.

[30] J. Carcopino, 'Sur l'Extension de la Domination romaine dans le Sahara du Numidie', *Revue Archéologique*, 1924, pp. 316–25.

J. Guey, 'Note sur le limes de Numidie et le Sahara au IVe siècle'. *Mélanges de l'Ecole de Rome*, 1939, LVI, 220.

[31] The probable prototype of the modern Berber 'tighremt', except that the place of the church has been taken by the mosque. Otherwise the plan is identical.

[32] Most of the buildings were of mud and stone construction, but in some villages very carefully hewn and dressed blocks were used in what appear to be ordinary buildings, e.g. at Tebessa Khalia two miles south of Tebessa. The growth of prosperous villages in the Hauran in the 4th century may perhaps be quoted as a parallel development in Syria.

The key to the comparative prosperity of the North African village in the late Roman period is the successful cultivation of the olive. In the 4th century North Africa was as famous for its oil as two centuries earlier it had been for its wheat.[33] In the first centuries of the Roman occupation prosperity lay in the wheat-producing areas of the Tunisian and Algerian river valleys, which were also those most open to settlement and Romanization; but in the 4th and later centuries the remoter parts of Roman North Africa, the high plains of southern Algeria, and the back-country behind the ports of Leptis Magna and Tripoli where native traditions had resisted the impact of Rome, became the centres of Africa's wealth. These were the best olive-growing areas, and the social change which resulted to the detriment of the Romanized town-dweller in the wheat areas should not be underestimated. Even in the Tell native villages grew up among the ruins of the former Roman cities and olive presses were built amid the debris of bishops' palaces and fora (e.g. at Thuburbo Maius, and Djemila).

One of the most obvious signs of a Romano-Berber village in central Algeria is the remains of an olive press. At Kherbet Bahrarous there are remains of 85 presses, and at Bou Takrematem, once a *municipium*, but in the late Empire a vast rural settlement, visible traces of over a hundred presses. Excavation revealed small buildings containing one or two presses, often accompanied by a silo in which grain was stored—suggesting that each family had its own installation. Very much larger oil fabrics, some housing as many as eight presses, are to be found on the plains south of Theveste, or on the borders of Tunisia, as at Bir Sgaoun and Henchir Brisgane. On some of these Christian symbols have been cut, thus indicating a date.[34] The style of construction of the oil presses also suggests that most are contemporary with the churches in the same villages. These are facts which imply a coincidence between the revival of Berber art and the comparative prosperity of the North African villages in the 4th century, and this applies particularly to the high plain country of southern Numidia, which was equally a centre of North African olive production, and a centre of the African

[33] Among other texts bearing on this, see :—

Expositio totius Mundi et Orbis (ed. Lumbroso), p. 80–1.

'Ab hac provincia, Africae regio dives in omnibus invenitur; omnibus bonis ornata est, fructibus quoque et iumentis, et poene ipsa omnibus gentibus usum olei praestat'.

[34] For instance, at Henchir el Gouma, and Henchir Khadem, between Cillium and Thelepte (Kasserine). P. Gauckler, *BAC*, 1897, p. 385

artistic renaissance. Both these developments may be associated with a Berber religious movement, the Donatist Church.

From the distribution map which can be constructed of Donatist and Catholic sees, and from literary evidence which has been amply borne out by archaeological discoveries, there is no doubt that Donatism had both its origin and centre in southern Numidia and was a religion which had a particular hold over the African country populations in general. It is clear too, that the inhabitants of the villages of southern Numidia from the 4th–7th centuries were as fervently Christian as their successors are Mohammedan.[35]

The village churches are very similar and suggest a common form of cult. All contain a martyr's tomb beneath the altar, and in many there is an additional coffin alongside holding relics. Biblical texts, often relating to persecution, were painted on the white plaster which covered the interior of the building. The Donatists considered persecution by powers of darkness whether in the form of the Imperial authorities, or of their Catholic rivals—an inevitable and necessary part of the Christian's life. Donatism was above all a religion of the Holy Spirit which stressed that the act of martyrdom was the highest form of sacrifice to God, and paid great heed to literal interpretation of the Scriptures. In many churches inscriptions bearing what are known to be Donatist watchwords have been found.

It has been shown how most of the examples of 4th–5th century Berber art have been found in Christian churches, especially in southern Numidia. It would, however, probably be a mistake to consider Berber art a religious art inspired by the needs of liturgy. One might interpret it as a popular art which finds its best means of expression in a religious setting. In North Africa popular movements in any cause have generally taken on a religious form, and one would expect the art of the people to be closely associated with their religious faith. Two examples of this association between Berber art and the Donatist Church may be quoted. The mosaic in the baptistery at the cathedral at Timgad already mentioned belongs not to a 5th-century monastery as previously supposed, but to a cathedral which was built almost certainly by the Donatist Bishop Optatus.[36] The latter was a picturesque and fanatical Donatist 'Mahdi', who held sway over southern Numidia

[35] Each Romano-Berber village in Numidia, hitherto examined, contains not one, but five or six chapels, just as a modern North African village may contain a number of mosques and koubbas, each for a separate brotherhood.

[36] E. Albertini, *CRAI*, 1938, p. 101.

for ten years before his execution for his part in Gildo's revolt in 398. At Mascula, on two of a group of five panels decorated with patterns similar to those found on stones from Vazaivi (Ain Zoui) and Henchir Tentilia there was carved the Donatist watch-word ' Deo laudes '.[37]

Donatist dissent and an artistic revival on the part of the Berbers were by no means incompatible. Both coincided with an upward trend in conditions in the African countryside, and may have expressed a growing feeling of independence on the part of the peasant towards the once all-powerful urban landowner. Donatism was a continuation of that school of African Christians which had always seen in the new religion a weapon by which the dominant Roman civilization in Africa could be attacked. This spirit, as illustrated in the works of Tertullian, prevailed in 3rd-century African Christianity. Those who held these views only became Donatists in the 4th century when Constantine supported the more moderate pro-Roman party among the African Christians, and took economic measures to prevent the extremists ever again exerting their influence within the Church. Those who became Donatists renounced all study of Latin literature as well as the more material aspects of Roman city life, games, circus, and theatre, as had African Christians in Tertullian's and Cyprian's day. The Bible became for them what the Koran remains for their descendants, the single source of all learning.

Added to the impetus which Donatism gave to the Africans' hostility to the cultural aspects of Roman civilization in Africa, the Donatist Church provided a focus for the economic discontents of the peasants. The latter had the means of prosperity, in their olives, barley, and flocks, but a disproportionate weight of the burden of Imperial taxation fell on their shoulders. The citizens who were responsible for obtaining the quota of taxes on pain of restitution from their own estates if they failed to do so, were unlikely to be sparing on the crops of the weaker men. The wealthier landowners were able to evade their obligations, but the laws of the Codex Theodosianus relating to 4th and 5th century North Africa paint a grim picture of the sufferings of the peasants at the hands of the tax-collectors. Moreover, the latter were often leagued with the richer landowner in plots to divide up the lesser men's estates.

[37] Gsell and Graillot, *Mélanges de l'Ecole de Rome*, 1893, XIII, 499–501. This same war-cry has been found on a number of other similarly carved objects from Numidian churches, e.g. Vegesela, Sef-ed-Dalaa, and Henchir bou Said. Iomnium (Tigzirt) and Vazaivi (Ain Zoui) also were both undisputed Donatist sees in the early 5th century.

On three occasions during the 4th century, the African peasants rose against Roman rule. Each time, contemporaries, or writers in the following century, such as Zosimus (IV, 16) were agreed that the causes of the revolts were a combination of fiscal oppression and hatred of the larger landowners. The same areas which have produced most examples of Berber art of this period, the Kabylie, and southern Numidia, were also the centres of the risings. Each time, in 345–46, in 371, and in 397, the Donatist Church supported the rebels, while the Catholics threw their weight into the scale of Roman authority. In all these periods of revolt, the Donatists, or at least the more fanatical among them, attempted to enforce a social programme resembling the primitive communism of the Early Reformers, and to redistribute land and inheritances among the peasants.

The revival of Berber art in the 4th century must be regarded against the background of these wider developments. It is one of the symptoms of the decline of Roman culture in North Africa; one of the explanations why North Africa is not romance territory; and why the river valleys of Tunisia and Algeria are littered with the ruins of once-flourishing Roman *municipia* while the Berber village in the Aures or Kabylie has survived. How far the parallel revival of Celtic art in Britain can be associated with any such series of revolutionary movements is uncertain. There are indications of a renewed interest in Romano-British religion in the same period. Temples are built in old Iron Age encampments; there is a harking back to Iron Age technique and ornamentation in pot-making; and it is possible that the populations of the downland villages in southern England increased. But this is scanty fare. These trends cannot yet be connected up. We have the clues as to what may have happened in Britain, but the substance of the story still eludes us.*

* An interesting series of Libyan and Romano-Libyan votive and funerary carvings is shown by J. Guey in his 'Kriba et à propos de Kriba', *Mélanges de l'Ecole de Rome*, 1937, LIV, p. 85 ff.

Ceramic Art in Early Iran

by V. Gordon Childe

The Comparative Stratigraphy of Early Iran. By Donald E. McCown. *Oriental Institute of the University of Chicago: Studies in Ancient Oriental Civilization*, No. 23, 1942. pp. 66.

TWENTY-FIVE years ago the prehistory of Hither Asia beyond the Mediterranean fringe was still represented only by the finds from Susa in Elam and Anau in Turkmania. Since the most spectacular relics recovered from the earlier levels of both sites were sherds of painted hand-made pottery, there was a tendency among archaeologists to speak of a Painted Ware Culture. It was encouraged when, after the last war, excavations in Iraq and in India too began to produce early sherds exhibiting painted decoration. Frankfort was perhaps the first to demonstrate in detail that this 'culture' was an abstraction produced by ignoring technical, stylistic and formal differences in the interest of one rather superficial point of similarity. He not only denied the genetic connexion between Susa I and Susa II, assumed by M. Pottier, but distinguished from both the Ubaid culture of Sumer while recognizing its probable affinities with Susa I. Scientific excavation during the last fifteen years has multiplied the varieties of painted styles and of cultures symbolized thereby in Mesopotamia and established their relative succession. In Syria and Assyria we have: (1) the Samarra and Halaf styles; (2) Ubaid; then (3) a plain ware period; (4) the wheel-made Nineveh V ware; in Sumer (i) Ubaid, then (ii) Uruk with unpainted wheel-made vases, (iii) thereafter Jemdet Nasr, painted again, and finally (iv) Scarlet ware at the beginning of Early Dynastic. Rather later systematic excavations at Tepe Hissar near Damghan, Tepe Sialk near Kashan, Tepe Giyan in Luristan and finally at Bakun near Persepolis established local sequences in northern, western and southern Iran respectively. But at the same time they emphasized the contrasts between the several highland cultures and their divergence from those of the Mesopotamian lowlands. No relative chronology valid for the whole of Iran has yet been agreed

upon, still less an absolute chronology that would bring the Iranian sequences within the accepted Mesopotamian scheme.

The present work is a valuable contribution to unravelling the Iranian chaos. Without attempting to provide a ' primer of Iranian archaeology ', the author has industriously assembled, and tabulated conveniently in well-drawn figures, those traits—mostly ceramic designs, but also selected pot-forms, metal types, seals and ornaments—that seem adapted to establishing correlations between the various Iranian and Mesopotamian sequences. He has thoughtfully added an excellent map contoured at 500 m. intervals.

The first result is the definitive resolution of what was once treated as ' the Highland Culture ' into two cultural cycles quite distinct from the start. The one, Northern, represented by sites facing the central Persian desert basin—Sialk, Rayy and Hissar ; Anau and Shah Tepe on the Transcaspian lowlands ; and probably, I would add, many sites in Waziristan and Baluchistan—is sharply contrasted not only in the colour and decoration of its pottery but also in burial-rites and other traits to the ' Buff Ware ' cycle, equivalent to Frankfort's Highland Culture, long known from Elam and here traced eastward to Fars (Persis)—it could be pursued even to Seistan and Makran. In the former the painted pottery is generally reddish, the dead were buried among the houses, not in separate cemeteries, and female figurines were not made. Ghirshman's excellent excavation at Sialk provides a standard sequence, the last phase of which can be dated by imports from historical sites. Hissar I and even Anau I–II can be correlated fairly precisely with the Sialk sequence.

In the buff-ware province the sequence is not so clear. McCown relies primarily on the two *tells* near Persepolis—Bakun B and Bakun A —though the sequence from B to A is said not to be continuous and neither has yet been published fully, then on Ghirshman's soundings at Giyan that yielded almost exclusively pot-sherds in a rather ' amorphous stratification '. He feels obliged to treat ' Susa I ' as an ' unstratified deposit ' though French archaeologists distinguish from *style I* a *style Ibis*.

The possibility of correlating developments in the two provinces depends on the assumption that they ' influenced ' one another and that this influence is reflected in ceramic motives. (As the cultures of each province remain distinct, ceramic technique does not enter into the discussion). On the other hand as the Mesopotamian Ubaid culture is regarded as a western offshoot of the Buff Ware culture the

latter's correlation with Mesopotamia consists in determining, again mainly with the help of designs, at what stage in its development Ubaid broke away. Thirteen figures, four of them folders, are devoted to illustrating these two kinds of correlation.

As the majority of the motives compared consist of rather simple geometric elements, it might be doubted whether the comparisons would prove really significant, whether indeed such simple designs might not be expected in any and every culture. In fact we note that the same Iranian design is presented as illustrative of agreements with both the Halaf and Ubaid styles in three instances, and in three more to illustrate agreements with Samarra in addition. The truncated zigzag again is cited as an agreement with Samarra and Ubaid. Three or four motives, figured as common to Ubaid and Iran, recur also on the later wheel-made pottery of Nineveh v, a few others even in the early Iron Age pottery of Sialk vi. In reality, however, these strictures apply to only a very small fraction of the patterns McCown has collected and illustrated—in Fig. 13 alone he presents no less than eighty Ubaid designs. Most of the selected designs do seem really distinctive of the relevant groups and practically confined thereto.

Now remembering that the author's aim is to define, not cultures, but stages within cultures and chronological relations between them, it is significant that not one of the Ubaid motives on which he relies is conspicuous on the funerary pottery from Shahi-tump in Makran. Yet, judged by burial-rites and ceramic techniques and forms this cemetery belongs to essentially the same culture as Susa i, but to a substantially later period (if Stein be correct in saying that the graves were dug into a ruined settlement of the Harappa period). The divergence of the Shahi-tump ornamentation from the standard Ubaid repertoire presented here may be taken as supporting the claim that the stylistic comparisons used are significant chronologically.

Nevertheless the way is beset with pitfalls as the author himself admits. Not only is the sequence within the Buff Ware province of Iran imperfect and its correlation through Giyan with the north-eastern province loose to say the least, but the sequence in Mesopotamia is not yet as firmly established as could be desired. McCown treats the Ubaid culture as occupying the same chronological horizon in Sumer and Assyria (2 = i) so that Samarra and Halaf (1) are absolutely older than anything yet found or even expected in the more recent alluvial soil of the Tigris–Euphrates Delta. But Ghirshman and Christian have both argued that the Ubaid culture appears later in the

north than in the south, in fact roughly in the Uruk period of Sumer (2=ii), so that Samarra and Halaf may occupy the southern Ubaid period (1=i).

McCown believes he can detect Halaf influence in Sialk II and in the Buff-Ware province at a stage represented in Bakun BII though a suggestively Halafian looking seal is figured from A (which is later). Not all the alleged agreements are at all convincing. Halafian pottery is very individual so that one can recognize it as confidently on the Syrian coast as east of the Tigris. But it owes this individuality not so much to a peculiar set of motives as to the style and technique with which they are treated. Hence from isolated motives it is difficult to judge the value of the comparison. The scale pattern for instance (Fig. 11, 42–4) was popular among Halafian potters but also in the Indus valley perhaps a thousand years later. For the beaded rosette, Fig. 11, 35–6, the Iron Age pottery of Sialk provides closer parallels than Halaf wares. The simple chequer, Fig. 11, 14 from Bakun A, as illustrated is unconvincing (indeed a seemingly better parallel from the Ubaid culture is figured in a later table). But if, as I think, it be taken from the vase figured in colour by Herzfeld, the value of the comparison is enormously enhanced; for this bichrome vase gives a really Halafian impression as I remarked in reviewing Herzfeld's book (ANTIQUITY, XVI, 361). But there is one motive, the bulls' protome, that does seem really distinctive of the Halaf style. McCown figures one which he says is unique in Iran, but in fact Gautier and Lampre illustrated several examples from Tepe Musyan long before the Halaf culture was known or defined. I have indeed long suspected that the Halaf culture itself actually extended farther south and east beyond the Tigris than is generally admitted. This extension cannot be proved by a consideration of designs alone, the sherds must be studied from a technical standpoint too. But it would explain the alleged Halafian influence on Sialk II and Giyan.

Be that as it may, comparisons between Iranian styles and the Halaf and Samarra wares of Mesopotamia give at best vague hints. Reliable conclusions can be drawn first in the Ubaid period. Then 'the contemporaneity of Bakun AI–IV, Susa I, Giyan VC, Sialk III, Hissar I and the Ubaid period is close to certainty'. Accordingly 'the end of the Ubaid period (i.e. Uruk) corresponds to, or is slightly later than, the end of the painted pottery cultures in Iran'.

The results of these synchronisms, based on designs, diverge from those which might have been deduced from inventions. The potters'

wheel, in use from Sialk III, 4* and Hissar I, B, must be older in north-eastern Iran than in Mesopotamia where it is first attested in the Uruk period. Conversely the seal, used already by the Halafians, will be older in Assyria than in Sumer and Iran where seals occur first in the Ubaid period, Susa I, Bakun A and Sialk III. Plainly, as McCown insists, these devices must have been invented somewhere and therefore used there earlier than elsewhere. The reader must decide whether synchronisms based on patterns are to be preferred to those dependent on techniques.

But in this case the adoption of the former criterion involves other complications. To accommodate the Uruk period, since Sialk IV, 1 is hardly earlier than the succeeding Jemdet Nasr phase of Mesopotamia, our author has to postulate a temporary desertion of Sialk, longer than the ash layer over Sialk III seemed to require in the excavator's eyes. Yet McCown has to admit the close similarity of spouted pots from Sialk III, 6 and those from Warka VII, Uruk period, to which Ghirshman called attention.

A further consequence is to raise the antiquity of Hissar II and III substantially above current estimates. On these Hissar III should fall entirely within the second millennium B.C. The arguments to this effect are far from unimpeachable. They depend in the first instance on analogies between Hissar III and late Bronze Age material from Transcaucasia ; then on the obvious, but none too close, affinity between the ' tea-pot ' vases from Hissar III and those from the Iron Age graves of Sialk VI. But McCown rightly insists that the late Transcaucasian flesh-hooks are socketed while those from Hissar are not. To the latter as well as to other metal types, beads, seal subjects (but not glyptic style) he can adduce a formidable series of Mesopotamian parallels going back to the Royal Tombs of Ur, but not demonstrably, outlasting the time of Ur III, i.e. end of the third millennium. He might have added the alabaster idols of Hissar III and Anau III that belong to the same family as those from Early Dynastic levels at Tell Asmer and Tepe Gawra.

Nevertheless none of these objects are demonstrably imports from Mesopotamia, but types that might have persisted a long time in a remote cultural backwater (though Hissar lying on the lapis route from Badakshan ought not to have been such a backwater). Then the well-known short sword from Hissar III, despite its archaic hooked

* The principal settlements denoted by Roman numerals are subdivided into phases distinguished by Arabic figures.

tang, has a leaf-shaped blade such as is peculiar in Europe not only to our swords of the Late Bronze Age but also to British socketed knives and to the ' srubno ' daggers of the contemporary Late Copper Age in south Russia. Moreover, if Hissar III really ends about 2000 B.C., we are left with a horrid gap of over a millennium in the archaeological record. But after all at Sialk too we already have a comparable interval between settlement IV, well dated by inscribed tablets to the early third millennium, and the late Bronze Age cemetery of V that seems to begin after rather than before 1500 B.C.

So here again McCown's conclusions may be just. But the evidence he cites does not suffice to settle the controversy definitively. It is worth insisting on this uncertainty since discussions of the Aryan migrations are almost inevitably pivotted on Hissar III.

In conclusion the author is to be congratulated on having unearthed the large ' weights ' (?) of Anau II and ? III from the obscure appendix to Pumpelly's second volume. But he has missed the fragment of a similar weight from Sialk III, 4 (Ghirshman, pl. LXXXV, 223). The type could of course be used as well for equating Anau II and Sialk III as for connecting Anau III and Hissar III. As a warning against reposing undue trust in the patterns here tabulated, one might note that the fragment from al'Ubaid, depicted in Fig. 13, 198 (which in any case bears very little resemblance to the Susa design to which it is compared) is almost certainly part of the moon-symbol seen complete on a well-known dish from Ur, and so fundamentally distinct from the semicircle motive of Susa.

Cave-Paintings, Lescaux

by W. H. Riddell

OWING to the fog of War, and because I live abroad, I did not hear about the discovery in the Dordogne (September 1940)* of Lescaux—a hitherto unknown painted cave of the utmost interest—until after my article ' Palaeolithic Paintings—Magdalenian Period ' was in type (see Antiquity, June 1942). Had I known of it, some modification in the treatment of my thesis would have been necessary. This new material, however, does not stultify the general trend of my argument ; it tends rather to support it, if the scarcity of information I have is correct. No comprehensive survey of this new treasure-house of Palaeolithic art is yet available, but an article written by the L'Abbé Henri Breuil for *L'Academie des Belles Lettres* leaves no doubt as to its outstanding importance. He says of it : ' Si l'Altamira est le Capitale de l'Art pariétal, Lescaux est le Versailles '. I understand also that the L'Abbé, whose judgment in these matters is *hors concours*, inclines to the view that the Lescaux paintings, though of the highest quality, are late Aurignacian in date. They belong therefore to the period of climatic amelioration known as the *Achen retreat*, which separates the two final glacial advances Würm I and Würm II. This dating is borne out by the fact that the animals depicted belong much more to a ' steppe and forest ' fauna than they do to a colder ' tundra ' one. There are for example no mammoths and no reindeer, but there are many horses, a considerable quantity of cattle (Aurochs ?) bisons, and a Saïga antelope—the head only, attached to a strange composite animal.

The open-air station at Solutré was occupied, as we know, by Aurignacian hunters before the intrusion into France from the east of the alien Solutrean culture, and it is presumably to the time of its occupation by the earlier people that we must attribute the Lescaux paintings. This very early date for works of outstanding artistic merit lends further support to my tentative suggestion that the painters of the Dordogne district (Lescaux is only 16 miles up the Vézère from Les Eyzies) were in point of time the first to attain that mastery of art which we find at Font de Gaume, and that the master-painters of Cantabria

* Published in The Illustrated London News, 28 February 1942.

and the North Pyrenees—those of Altamira and Niaux—came somewhat later in date. The well known Aurignacian (?) drawing of a Woolly Rhinoceros at Font de Gaume, which for veracity and proportion has no parallel in Cantabria or in the North Pyrenees at so early a date, has already given us a hint that the Magdalenian painters of the Dordogne had a long and impressive tradition behind them. That hint is considerably broadened by the discovery of contemporary work of much greater merit and importance at Lescaux.

The discovery of this new palaeolithic picture gallery opens an interesting field for speculation. Although pictorial art begins in the Aurignacian and goes on through the Magdalenian period, prehistorians, doubtless for good reasons, hesitate to ascribe any works of mural art to the intervening Solutrean. This sterile gap—sterile so far as painting is concerned for something like two millennia—constitute for students of Palaeolithic art an indubitable crux. The comparative crudity of most Aurignacian paintings tempts us to wonder whether the few finer examples of this period, such as the Font de Gaume rhinoceros and this new Lescaux series, may not more fittingly be attributed to those invading Solutreans whose artistic faculties are clearly indicated by their unsurpassed dexterity in working flint.

We may legitimately suppose that the first ' canvas ' the primitive made use of was his own body. Thence, almost automatically, he would proceed to decorate in a similar manner the small figures of men and animals he fashioned from chance blocks of ivory or stone. From that it is but a short step towards an application of colour to accidental shapes or stainings on a cave-wall that suggested an animal's form. The art of painting having got thus far we are asked to believe that it died out again for about two thousand years. In order to bridge this long sterile gap between clumsy Aurignacian beginnings, and the highly wrought art of the middle Magdalenian, are we more justified in thinking that the intruding Solutrean folk with their innate artistic talents acted, so to speak, as efficient go-betweens ? Influenced by the rough adumbrations of animals the Aurignacians had left on cave-walls, they carried on this work to a much higher level ; leaving, when ' tundra ' conditions returned in Würm II, their improvements—Lescaux for example (?)—as a heritage to the supplanting Magdalenians who elaborated them further yet. Unless we postulate some such continuity in the pictorial art of those distant times it is difficult to understand how the Magdalenians brought their art so rapidly to its high consummation.

Reviews

IRAN IN THE ANCIENT EAST : Archaeological Studies presented in the Lowell Lectures at Boston. *By* ERNST HERZFELD. *New York and London, Oxford University Press*, 1941. *pp.* VII, 363, *and* 131 *plates.* £12 12*s.*

Professor Herzfeld's prolonged sojourn in Persia and his original explorations and excavations there guarantee the authority and value of this monumental contribution to Oriental archaeology. Do they really justify a price that only the richest institutions concerned can afford to pay ? It is true the work is illustrated by 131 plates ; of these eight are coloured (they are described as ' hand-coloured ' and in any case are not direct colour-photographs such as have been employed so successfully for instance in the Oriental Institute's last volume on Alishar Hüyük, and are much more satisfactory for judging pottery) ; the rest are superb photogravures. They give an uniquely comprehensive survey of the ceramic, glyptic and toreutic arts of prehistoric Iran and of its architecture, sculpture and painting in the Aryan period. They are supplemented by 421 plans and line drawings which are aesthetically pleasing and, despite the absence of scales, scientifically accurate. But there is no map and the author's practice of spelling names (even such as Kārkūk and Tawrīz) with an unfamiliar, if correct, orthography makes such an aid unusually desirable.

Of 340 pages of text 176 are devoted to the prehistoric periods. Herzfeld begins with the Persepolis settlement that he again insists is truly neolithic. Instead of small buildings of one or two rooms that might have housed separate pairing families, it consisted of one continuous structure divided into a complex of chambers. Herzfeld concludes that the villagers did not live in monogamous families but ' in clans with strange marriage customs '—evidence is cited for the survival of ' matriarchy ' in historic times. This is just the sort of social organization that Soviet prehistorians expect to find in stadially comparable sites everywhere, but Herzfeld considers it a distinctively Asiatic trait. Arrowheads and axe-heads were absent (as, I would add, from Anau I and Sialk I) ; the only weapons were the sling and the club. Clay figurines or ' idols ' were manufactured. All were found decapitated ; ' they had been beheaded when they had been inefficient or unwilling to help '. One alone is of the fiddle-shaped type familiar westward as far as Crete. It ' is easily distinguishable as an import by the quality and colour of its clay. . . . This piece must have been imported in neolithic times from Crete to Persepolis ' (!)

The fine painted pottery is well illustrated by the coloured plates ; the design and colour on one bowl recall Tell Halaf ware, with which the remainder

show no relation. The motives decorating the pottery and contemporary buttons (button-seals) are compared discursively with those from other parts of Asia as far as China and from Europe without much attention to the chronology of the scattered sites. The text was of course composed before the publication of Tepe Sialk, that has done much to define the chronology of sites like Anau and Tepe Hissar. The lectures were in fact delivered in 1936, but the author admits using material from ' recent excavations that better illustrates the theories here advanced than that used in the original lectures '. Note that on p. 96 the ' oldest Helladic ware from Chaeroneia ' means, not ' Early Helladic ', but ' Neolithic A '.

The next cultural stage to be treated in detail, the Bronze Age, is illustrated at first mainly from Tepe Giyan. The pottery analysed ranges from the stylized art of Susa II, the relations of which to Frankfort's ' scarlet ware ' from Eshnunna are correctly recognized though the latter is perhaps dated too high, to the famous ' teapots ' whose relatives in Crete, Asia Minor ('Alishar IV ' equals ' Early Hittite ' in the latest report) and Turkestan are illustrated by nice sketches. Mace-heads are given more attention than they usually receive. The knobbed type is of peculiar interest to European prehistorians owing to its occurrence in southeastern Europe. In Russia it is represented not only in the late hoard from Borodino in Bessarabia that Herzfeld figures, but also in the collective burial at Mariupol, supposedly the oldest of the Pontic ochre-graves. This example, not mentioned in the text, resembles most closely the Tel'Aqrab specimen here figured that is not much older than Sargon of Agade; Makarenko suggests the possibility of deriving the type from the well-known rhomboidal club-heads of the Northern Forest culture. In the same connexion Herzfeld illustrates by a photograph and three very good sketches a stone battle-axe ; it is unique in Iran, but yet might be compared to a copper double-axe from Susa, published in 1934 and then assigned to the XXXVth–XXXIInd centuries B.C.

The author then passes on to the celebrated ' Luristan bronzes ' and a stimulating excursus on the origin of iron-working and the location of ' Qizvatna ' —in Pontus—and another on the torques, earrings, lock-rings, cuff-armlets and pins that are common to Iran and Transcaucasia, on the one hand, and south-eastern and central Europe on the other. He insists that many of the forms enjoyed a long popularity in both areas, but not in the Sumerian province. Their distribution is explained by the postulate of a tribe or clan of wandering smiths and miners, identifiable anthropologically with the ' Prospectors ' of Peake and Fleure, historically with the Hebrews' Tubal, the Greeks' Chalybes, whose home would be in Pontus, famed alike for metallurgy and viticulture. ' Way-faring prospectors, smiths and dealers travelled all over Eurasia disseminating their products and calling into existence at places otherwise unconnected local

industries which, starting from a common origin, in time took diverging directions '.

Chapter II, entitled ' the Dawn of History ', discusses first the Aryan migrations. Both the first migration that brought an Aryan dynasty to the throne in Mitanni (North Syria) and the Vedic Indians to the Punjab, and the second that established the Medes and Persians in Iran, can be reconstructed in the light of the third, that of the Sakâ. From the Jaxartes plains the latter were pushed into Iran by the Hiung-nu soon after 150 B.C. A branch established a rather ephemeral dynasty on the Persian Gulf, others settled in Sīstan (Sakāstan) whence they conquered India.

Some notion of the civilization established in Media as a result of the second migration can be gained from the Assyrian annals and sculptures and from rock-cut chamber tombs that are well described. But no Median site has been excavated, and the dating of the tombs is rather uncertain since no inscriptions nor grave goods have been found in them. In any case such sepulchral architecture is not truly Median but Anatolian or rather aboriginal ' Highland '. The Persian rock-cut tombs are inspired by the same sort of ideas, reproducing the house of the living. The plan indeed differs from the Median in detail, but still imitates a type of house ' aboriginal to Asia Minor and the Caspian highland '. Hence the well-known similarity of the Achaemenid Persian columns to the Ionic need not indicate Greek influence ; it can be explained by parallel translations of a common wooden ancestor into stone.

The attribution of such house-tombs to the Medes and Persians might seem hard to reconcile with the common notion that the Persians as a result of Zoroaster's religious reformation exposed their dead. But Herzfeld adduces plausible arguments for the view that exposure was not originally the Zoroastrian rite (it is ignored in Zarathustra's own hymns, the Gathas, and is said by Herodotus to be exclusively Magian) ; on the contrary exposure was the use of the pre-Zoroastrian daeva-cult and its priests, the Magi, and only later became grafted on to Zoroastrianism with the Magian priesthood, perhaps under the Parthian kings to secure sacerdotal support for the national reaction against Hellenistic imperialism. The Zoroastrian rite would be simple inhumation as contrasted both with the Magian practice of exposure and the pre-Aryan use of the house tomb which the Aryans under the first Achaemenids had adopted. Darius' reversion to a simpler type of sepulchre is taken as proof that he was the first of his dynasty to embrace the reformed faith.

The fifty-three pages devoted to the Achaemenid period are mainly occupied with an account of the ruins of Persepolis and Pasagardae illustrated by plans and superb photographs. British prehistorians should note the linch-pin shown on pl. XXXIV, 1. The remaining 65 pages are consecrated to the Arsacidan

and Sassanian (Parthian) periods. They include an account of the Parthian castle at Kūh i Khwāja in Sīstan, attributed on stylistic grounds to Gundopharr (first century A.D.) Paintings on the original wall-plaster are illustrated very happily by three coloured plates.

Professor Herzfeld more than once goes out of his way to castigate European prehistorians for failing to recognize the Oriental analogies to European types. In fairness to himself and his colleagues, a prehistorian reviewing the book must point out that the author's strictures are valid mainly against German prehistorians of the pre-1914 vintage, and his own knowledge of European prehistory might be derived wholely from lecture-notes of equal antiquity. Herzfeld complains that the ' conventional date for Troy II is 2600–2000 B.C. which is too late, and an instance of the missing synchronization of European prehistory with the old Oriental history '. He ignores both Blegen's recent excavations and the researches of Åberg, Bittel and Reinecke, who also rely on Oriental parallels, but choose others than those which have struck Herzfeld. He tells us that ' a date earlier than the eighth century B.C. has scarcely ever been assigned ' to the Maikop kurgan ; Rostovtzev, A. V. Schmidt Yessen, and Childe favour the third millennium, Farmakovski, Tallgren, Äyräpää and others the second—I can only name Smirnov and, with reservations, Degen-Kovalevskiĭ as wanting to make the tomb later. The way double-spiral-headed pins ' spread from (*sic*) Western Europe to India avoiding the lands of the ancient Near East civilization ' is presented as an original discovery ; in 1936 I published a map of the distribution of such pins to illustrate precisely this avoidance.

V. G. CHILDE.

MEDIEVAL STUDIES IN MEMORY OF A. KINGSLEY PORTER. *Edited by* WILHELM R. W. KOEHLER. *Cambridge* ; *Harvard University Press*, 1939, 2 vol. *pp.* XXIV, VI, 728, *illustrations*. 25 *dollars*.

When A. Kingsley Porter was drowned in 1933 at the age of fifty, in the ocean near Ireland, to whose early art he had devoted his last years, a life rich in fruitful work and still full of promise came to a premature end. A sketch of his life and character contributed by his wife and a bibliography of his writings at the beginning of these commemorative volumes may give an idea of his personality and achievements. Friends and pupils of his, invited by the Fine Arts Department of Harvard University, wrote these Studies, which are inscribed ' to the memory of a great scholar and beloved teacher '. The contents of these excellently printed and richly illustrated quarto volumes are as varied as Porter's own work ; they embrace questions in medieval art of a more general kind, and special subjects relative to Early Christian and Byzantine art, to the art of Italy, France, Spain and Portugal, Germany and Switzerland,

the Scandinavian countries and the British Isles. The international community of the contributors stretches from U.S.A. to Sweden, and the plurality of the languages used : English (22 essays), German (7), French (6), Italian (1), correspond to the scientific position which Porter held, and may remind us also that scholarship, in spite of all the difficulties of modern times, has preserved a kind of *Civitas Dei* of former days, to use a famous expression of Gaston Paris.

The essays include subjects on the history of medieval art, and emphasize more than once a contrast which has become ' nearly a commonplace in these last years ' (Françoise Henry, *Irish Art in the Early Christian Period*, 1940, p. 186), the difference between Mediterranean Art and the early northern abstract and ornamental decoration. The first essay has not only the widest scope in this respect but also throws down the gauntlet to the ' historians ' of art—an article by Josef Strzygowski on misleading ingredients in the conception of the Middle Ages (*Das Irreführende am Begriffe ' Mittelalter '*). It is no surprise to anybody who has read some of the last publications of this scholar of unusually extensive knowledge and of much suggestive work but also of sharp sympathies and antipathies, and of naive as well as queer polemics. He defies the ' history ' of art, and asks for a statement of its permanent intrinsic substance (*Wesensschau*) ; he dislikes the belief in the value of Mediterranean art, of stone building and of the sculpture of the human body, which are connected in his opinion with the powers of might, empires, courts, churches, monasteries, scholasticism, academies, humanism and baroque, all of which he rejects. He is fighting against the usual idea of the Occidental Middle Ages, in which he tries to separate different, and, in his opinion, incongruous elements ; the conception of the real Middle Ages of the West should cover only northern components which alone are thought to be creative. He connects the art of the migration period of the Germanic peoples with the even more ' Indogermanic ' features of the so-called Gothic art, but excludes Romanesque art which continues the Mediterranean, originally Oriental, art of ancient times, in the same way as Greek art before Alexander the Great is ascribed to the North. He opposes square stones and the *basilica* to the circular, ' radiating ' buildings, to the ornamented symbolical wooden work of the Oseberg-ship and to the pointed-arch style of the later Middle Ages in which he thinks to find more original Germanic substance of the very people, not of the spirits of ' might ' embodied also in church and monkery. It is impossible to give here a review of all the ideas of the author ; he goes back to the ice-ages and embraces even the unknown art of countries covered by ice today like Greenland ; he compares in his *Wesensschau* e.g. the art of Armenia, Iran (to be distinguished from Persia) and Central Asia ; he discovers Northern substance in the roots of Islamic art. He thinks to lay the foundation of a real ' science ' of art in the place of an

imaginary ' history '; others may think his way of speculating to be an unreliable road of subjectivity which simplifies complicated problems by a biassed scheme, in spite of all suggestive ideas.

Other articles also have a wide scope, but the authors aim only to be historians of medieval art. E. W. Anthony considers the question of Far Eastern influence on Early Christian art ; did the Mediterranean art of the first centuries of our era owe a debt to ' the world beyond the Iranian plateau '? There are as yet possibilities rather than probabilities ; perhaps Indian influence upon Coptic sculpture may be admitted. U. Monneret de Villard seeks the elements of the Romanesque portal in the Christian Orient, where it is to be found in Armenia earlier than in Europe, and considers even the so-called Gandhâra-art as a starting-point. H. Beenken gives thoughtful and lively comments on the relation of medieval art to those of Antiquity and the Renaissance. The latter is no mere renewal of ancient art in spite of all reconnecting links, but is a new development having medieval art as one of its bases, as is shown mainly in respect of Romanesque art. The Carolingian and Ottonian ' renaissances ' took over an ancient heritage, the Italian renaissance northern elements ; these connexions are foundations of the spiritual unity of the West : the difference of method and point of view in comparison with Strzygowski is evident. A. Goldschmidt, one of the doyens of the German historians of art, contributes another survey embracing the whole medieval period from the particular aspect of the British Isles, by considering ' English influence on Medieval Art of the Continent ', a fine and suggestive essay solid in spite of its brevity. I repeat the result : ' the British Isles represent the North European aspect of the medieval artistic spirit, a constant influence on the southern element and a constant mingling with southern ingredients produced the richness of medieval art '.

Two essays refer to the literary history of art subjects. W. M. Whitehill whose work on Spanish Romanesque architecture of the 11th century was reviewed in ANTIQUITY, XV, 393–95, sketches the changes in the study of Spanish Romanesque art. Ch. Oursel's short contribution is devoted entirely to the ' extraordinary activity ' of Kingsley Porter in respect of the art of Burgundy. R. Hamann emphasizes the large part given to animals in the Romanesque sculpture of France. He does not trace the development of the external qualities but dwells on the ideas and beliefs which were the basis of these representations, on the acceptance of demoniac beings personified by animals. A shorter essay by H. Focillon on survivals of Romanesque sculpture in French Gothic art partly refers to the same or kindred representations. R. S. Loomis contributes a richly documented article on chivalric and dramatic imitations of Arthurian Romance, that is, tournaments and other pageants of the 13th, 14th and 15th centuries which show the wide influence of the Round Table cycle.

The results of the excavations at Cluny by the Mediaeval Academy of America receives a summary in K. J. Conant's article on the third church at Cluny, the principal parts of which were built during the 12th century. G. G. King writes a lively article on little Romanesque churches in Portugal, while A. W. Clapham describes the types, and in particular, six typical examples of minor Irish cathedrals. J. Roosval refers to a third borderland of Western civilization, Sweden, writing about the ruined church of St. Peter at Sigtuna, the first cathedral of the country (about 1050), and especially on the primitive vault of the central tower. P. Frankl explains the peculiar position of the west towers of the famous Naumburg cathedral from the (partly conjectural) history of the building and compares it with the Sicilian cathedrals of Cefalù and Monreale.

The iconographic subjects of capitals are in the forefront of an essay by L. Bréhier on the characteristic traits of Romanesque sculpture of the (Lower) Auvergne. R. A. S. Macalister, supplementing a study by Romilly Allen (1899), describes the characters of the sculptured stones of Wales, and gives a list of those inscriptions which can be reasonably dated (from the 6th to the early 14th centuries) to make 'a certain chronological framework into which the rest of the monuments have to be fitted'. E. I. Seaver speaks of some examples of Viking figure representation, in Scandinavia and the British Isles, and states briefly the distinguishing features of this art before the great migrations of the 9th and 10th centuries, the modifications of the style in the 'Atlantic North' and 'Baltic North' during the migration period, and the traces imprinted by it upon the early Romanesque in these countries, from Sweden to the Isle of Man.

The scanty remains of the Annals of Ravenna or (*Consularia Italica*, as Mommsen called them) are one of the important sources for the time of the decline and fall of the Western Roman Empire. Lately the lower part of a single leaf of the 11th century emerged in the Merseburg chapter library; it is evidently an exact copy of a 6th century Ravenna manuscript and contains, with gaps, the annals of 411 to 454, but will interest the archaeologist mainly by ten drawings illustrating the text, a unique piece of work, excellently edited by B. Bischoff and W. Koehler. Connexions between northern and continental art are expounded in an ingenious article by A. M. Friend on the Canon Tables of the Book of Kells. Resuming an idea of Bruun he explains some peculiarities of the famous Celtic manuscript (especially the 'beast-symbols, of the Canon Tables) by the influence of a continental Carolingian Gospel book (of the 'Ada school'), which 'departed to the Celtic world beyond the sea' after it had left its imprint on Harley MS. 2788 of *c.* 795.

Lack of space only permits a short account of the other contributions. J. Puig y Cadafalch writes on a capital of Bages in Catalonia of the late 10th

century ; M. Schapira gives a detailed analysis of some sculptures (story of Theophilus) in the abbey church of Souillac in southern France of about 1120; O. Homburger studies the style of figures and ornaments of the Gallus porch of Basel cathedral of *c.* 1200 ; C. R. Morey ascribes some Gothic ivories of the 14th century to northern Italy instead of France ; J. Baum compares mural apse paintings of *c.* 1000 in the church of San Vincenzo in Galliano in Lombardy with works of Basel and Civate. Ch. R. Post writes on an altar painting of the later 15th century at Barcelona which came from a convent in the Pedralbas suburb, and on its painter whom he calls *the Pedralbas Master*. Illuminated manuscripts are the subjects of other articles : a fragment of a tenth-century Byzantine psalter in the Vatican Library is treated by E. T. De Wald. A manuscript from Troia in Apulia, now at Naples, in Beneventan script of the early 11th century, by Myrtilla Avery ; Ch. Niver makes a liturgical analysis of the psalter in the British Museum, Harley 2904 of *c.* 980 and gives reasons for Ramsey as scriptorium for a triple litany invocation (cp. also M. Coens, *Analecta Bollandiana*, LIV, 1936, p. 11).

How many European monuments have found their way to the other side of the Atlantic, may be guessed also from these volumes. Fr. B. Deknatel recognizes the influence of Amiens cathedral in sculptured columns from Sahagún in the Spanish province of Léon (early 13th century), part of which is now in Cambridge, Mass. M. Aubert describes statues of *c.* 1185 from St. Martin at Angers now in the museum of Yale University. A reliquary of the 12th century in the Metropolitan Museum of New York, an example of the famous Limoges enamels, is shown by M. Ch. Ross to have come from Champagnat in Limousin. A dismembered Romanesque wooden antependium of the 13th century from Farrera in Catalonia is described by W. S. Cook ; what remains is distributed among three museums of the U.S.A. Nine pieces of ecclesiastical German Late Gothic sculpture of the 15th and early 16th centuries published by Ch. L. Kuhn, are connected only by their present home, the Gardner Museum in Boston. Two Italian panel paintings of *c.* 1470, which formerly belonged to the Barberini collection in Rome, are the subject of a large, subtle study of R. Offner ; they are now in Boston and New York. E. Panofsky was fortunate enough to find in the library of R. Garrett in Boston 105 leaves detached from a Book of Hours of the workshop of the ' Maître des Grandes Heures de Rohan ' (*c.* 1425), now MS. Paris Arsenal 647.

This survey may show the importance of the publication, which extends over many fields of medieval art and does honour to the memory of a scholar who would have been the proper critic of the manifold contents. The only regret is that there is no index to make the various details more easily traceable.

W. LEVISON.

CHRISTIANITY AND CLASSICAL CULTURE : a study of Thought and Action from Augustus to Augustine. *By* C. N. COCHRANE. *Oxford : Clarendon Press*, 1940. *pp.* VII, 523. 30*s*.

The late Professor A. E. Housman is said once to have turned suddenly from the textual criticism of one of the loveliest of the Odes of Horace to an appreciation of its poetical beauty, to the mingled surprise and delight of his class. Something of the same pleasure is offered by Mr Cochrane to his readers, who will find themselves asked for a change to study the details of the Roman scene not for their own sake, but in order to understand the nature of the drama staged upon it. They will also find the two strands of history—secular and ecclesiastical—interwoven, as they ought to be, instead of parted in a quite unnatural separation. If to the names of Augustus and Augustine on the title-page you add that of Constantine the Great as a mean term, you will obtain at once an excellent idea of the scope and direction of this book. Part I, ' Reconstruction ', appraises the achievement of Augustus ; part II, ' Renovation ', deals with Constantine's attempt to re-form the Empire on a new basis of alliance with the Christian Church '; part III with the character of the Christian contribution to history—above all, with the work of St. Augustine. Mr Cochrane thus conducts us along the path that leads from an old world to a new, surely one of the most fateful transits in human history, the true meaning of which we are still debating today. Perhaps, at some points, his argument might have been brought more directly to his reader by rather simpler and clearer phrasing. Perhaps, too, he is more successful in describing the Christian end of the transit than the pagan. That, at any rate, was the feeling of the present reviewer, who rather missed, in the first part, that close and intimate contact with the age which appeared later. So many themes of interest,—Euhemerism, Emperor-worship, the cult of Fortune and kindred powers, the Golden Age,—seemed to miss their full place in the scheme. Perhaps the fault—if fault there be—lies with Mr Cochrane's method of citing quite a few men of genius as witnesses to their age. The man of genius, for all his powers of expression, may be something less than fully representative just because he is a man of genius. And there is more to it than this. Unless you check your great man of letters by reference to the common man, as you can trace him through inscriptions, coins, popular stories and the like, you are in very serious danger of misunderstanding your great man himself on many points. His power drives his meaning home to you, but, though you cannot help understanding a great deal, you also do a lot of misunderstanding, owing to subtle differences in the meanings of words, which can easily escape you. Just to give one example, very few modern writers show any sign of having followed the Latin word ' pietas ' through all its normal shades of meaning.

These criticisms may seem a trifle odious, but, even if they are entirely justified, Mr Cochrane's work should not be judged by its failure to reach an incredible, complete, success, but by the very great positive contribution it makes to a splendid theme. It is always interesting, often intensely exciting. Today, when we are all centring down towards the fundamentals of the ' good life ', it should have a special appeal to make and a special service to render.

H. MATTINGLY.

CHRISTIAN ART IN ANCIENT IRELAND. Volume II, Edited on behalf of the Government of Ireland *by* JOSEPH RAFTERY. *Dublin: the Stationery Office*, 1941. *pp.* 184 *with* 50 *plates.* 30*s.*

The first volume* of this work, edited by Dr Mahr, appeared as long ago as 1932, and contained 80 plates. This second and concluding volume provides another 50 together with introductory essays on the metal work by Dr Mahr, on the architecture and sculpture by Mr H. G. Leask and descriptive notes by the Editor. The provision of this large series of excellent illustrations is in itself a great gain to students of early Irish art, and in particular the inclusion of many objects now in Scandinavian Museums simplifies the task of those who wish to enlarge their knowledge of the early Christian metal-work. The importance of these finds becomes apparent when it is realized that many of them were found in datable contexts while the majority of the objects preserved in Ireland itself can only be dated on stylistic grounds. It is however difficult to discover the principle on which these illustrations have been selected. In spite of the title there is no attempt to give a comprehensive picture of early Irish art. Only the metal-work is adequately represented. Four plates of the Book of Durrow and one of the Book of Kells represent the entire contribution of the Irish manuscripts. Though architecture and sculpture are rather more lavishly treated the picture given of these arts is also utterly inadequate. The Editors might reply that published corpora of the MSS and the sculpture are already available in works like those of Zimmermann and Françoise Henry, but if this is really their defence, the choice of a less misleading title would seem to have been indicated. The chronological limits are equally vague. A comparatively large number of plates are devoted to metal-work later than the invasion of 1172, though this period is largely ignored in the text. On the other hand one plate is deemed sufficient to cover the pagan background to which Dr Mahr devotes one of his two introductory essays.

Of these three essays the first is unsatisfactory in that the material on which it is based is not illustrated, while the argument is not developed in sufficient detail to allow the reader to test the conclusions. To judge properly of the new

* Reviewed ANTIQUITY 1933, VII, 113.

theories about this obscure yet important period it will be necessary to await the fuller treatment which Dr Raftery has promised. The second essay by Dr Mahr covers the early Christian period, principally those centuries preceding the Viking invasions though the hybrid art of these later centuries is not neglected. Dr Mahr is at his best when dealing with typological questions. In particular his treatment of the brooches (pp. 64–5) is masterly. His wide knowledge of the continental material also enables him to discuss the chronology of the metal-work with a real appreciation of the issues involved. In this connexion it is interesting to note his conclusion that the older zoomorphic type gave way to the ' Tara ' brooch about 700. Both are essentially Irish but the change in form is accompanied—one might almost say stimulated—by the introduction of new ornamental concepts. The date is within the half-century which saw the withdrawal of the Irish monks from Northumbria and their expulsion from Pictland, and there can be little doubt that these movements were largely responsible for the new artistic impulse which breathed fresh life into the placid stream of native Irish Art. One gap in the treatment of this period is a discussion of the difference between Saxon and Irish metal-work. Some of the fragments illustrated from Scandinavia have a Saxon look and the circumstances of their discovery in Viking graves do not enable us to determine their exact provenance. Yet it should not be difficult to do this, using the ' Tara ' brooches as a touchstone of Irish workmanship and comparing them with the growing corpus of Saxon metal-work. The problem is not made easier by Dr Mahr's uncritical acceptance of Mdlle. Henry's ascription of the hanging bowls to Irish sources. There is no scrap of external evidence to justify this view and the stylistic criteria on which the writer relies are extremely doubtful. The discussion of the shrines is thorough and the relationship of the ' house ' shrine to the late classical tomb well argued. We feel however that the author has here underestimated the extreme conservatism of the Celtic church. Much that looks strange would be explained were we more fully informed of the practices of the Church in Merovingian, Visigothic and late Roman Gaul. The final essay by Mr Leask is an admirable survey of the architecture and sculpture. It is a statement of orthodox views rather than a work of original research, and as a balanced survey within a short compass it is unequalled in this field.

C. A. R. Radford.

CONTRACTS FROM LARSA DATED IN THE REIGN OF RIM-SIN. *Ed. by* D. E. Faust. (Yale Oriental Series, Babylonian Texts, vol. iii). *New Haven and London*, 1941.

This is an excellent edition of business documents in cuneiform, thoroughly indexed, which maintains the high standard set by the Yale school founded by

Professor Clay. Some of the texts had been previously published by Professor Grant, but it will be an advantage to have the Yale collection in one volume. The interest of the documents lies in the fact that they are evidence for the legal practice and business procedure in southern Babylonia under Elamite rulers, before it was conquered by Hammurabi. As is pointed out by the editor, in certain cases the documents show that Hammurabi's Laws were a statutory recognition by the conqueror of practice or law already prevailing in the south. There are of course differences too, and it is precisely from these that most can be learnt, since they may reveal new features due to the Amorites. Most of the documents are in the Sumerian language, and they are consequently not easy to understand when any but the customary phrases occur; this is not frequent, and perhaps we may hope that the author will crown his labours by presenting a transliteration and translation of the documents not previously published, so that scholars may be able to use this material, even if they are not specialists in this type of text.

SIDNEY SMITH.

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